### ADMINISTRATION REPORT

ON THE

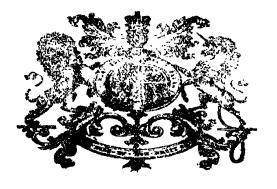
## RAILWAYS IN INDIA

FOR THE

# Calendar year 1906

BY

### THE RAILWAY BOARD.



Dated the 20th May 1907.

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### CONTENTS.

General remarks	regar	umg	cuang	es in	tue re	cport	•	•	•	•	•	1
Mileage .			•	•	•	•	•	•	•	•	•	1
Capital-									•			
Capital outl	ay		•	•	•	•	•	•	•	•	•	1
Budget allot	ment	s for	capital	l expo	enditu	re	•	•	•	•	•	1
Rolling stock and	d safe	ty a	pplian	es—								
Additions			•		•		,	•	•	•	•	2
Automatic !	rakes	3	•	•				•	. •	•	•	2
Lighting by	ygıs	and	olectri	city			•	•	•		4	2
Communicati	on be	twee:	n passe	nger	bua a	guard	s and	drive	rs in f	ast tr	ains	2
Interlocking	g and	bloc	k work	ing	•		•	•	À.	•	•	2 2
Statistical result	ts of v	work	ing		•		•		▼.		•.	2
Financial results	to th	ie St	ate-									
Financial rand of											ays ·	8
Capital lial as State	-railw	rays	and of	the	Madr	as ra	ilway	Grai	rantec			r
the old co Rates and fares	oneras:	ico, al	na rett	11 O I	net	carm)	ម្រុក ម	ici coll	•	•	•	5 5
Tuportant meas	·	/1 ^	vanta	•	•	•	•	•	•	•	•	5 <b>6</b>
Important work				•	•	•	•	•	•	•	•	9
Accidents—	s Com	prese	· (L	•	•	•	•	•	•	•	•	J
Accidents of	f all	Jazan	intiana									10
Serious trai			•	•	•	•	•	•	•	•	•	11
Damages by floo				•	•	•	•	•	•	•	•	11
•		ia ra	min	•	•	•	•	•	•	•	•	1,
Railway staff—		23				. 1	,		"	•		
Total numl teers	)(r 11),	r:111W	ay em	proy,	ana ·	tne n	ım bei	enro	iiea a	s vo	iun-	13
Police force	a .											38
Provident	Fund						•	•				1:
Fine Fund											_	1:
Schools		•	•		•	•	•	•	•	•	•	18
Railway survey	s .		-	•	-		•	-	-	-	-	1:
admining and reg	- •	•	•	•	•	•	•	•	•	•	•	•
			ΛP	PEI	NDI	CES.	1					
		•							<b>3</b> 4 3			
l.—List of open l tically arr the admir	anged	, wit	h thei	r len	gths,	letter	s used	l to d	enote	railw		1
2.—Mileage adde and from t	d to	the	railwa	ау ку	stem	of In	dia d	uring			906,	1
3.—Total railway	y mil from	lenge 1855	opene 3 to 19	d fo 0 <b>6, a</b>	r tra	ffie d	luring	, and	l at the	he en ed du	d of,	
the Vicero 4.—Mileago und with addit	er co	nstru	etion c	r san	etion	od at	the cl	ose of	the y	ear l	906,	2
5.—Capital autho State lines	rized + lease	to be	raise	d fo	r the	Mad raily	vays c	onstr	ucted	under	tho	2
"Branch to the 31s	Line'	' teri	ms, the	amo	unt ra	aised,	and th	ne am	ount'i	vitbd •	rawn	ç

### Appendices-contd.

		Page.
No.	6.—Amount allotted to each railway administration for expenditure on capital account during each official year	Omitted.
No.	7.—Capital expenditure on each railway system during the past ten years, 1897 to 1906	28
No.	8.—Capital outlay on the different classes of railways at the close of the year 1906	
	Capital outlay on each railway to the close of the year distributed over	32
No.	9.—Capital liability on account of railways classed as State railways at end of 1906	34
No.	10.—Main results of working Indian railways treated as one system from 1853 to 1906	86
No:	11.—Summary of the general results of working Indian railways treated as of e system for the years 1902 to 1906	38
No.	12.—General results of working each railway system for the years 1902 to 1906	40
	13.—Gain or loss to the State from railway outlay	
No.	15.—Coaching traffic. Details of — of each railway system  16.—Goods traffic. Details of — of each railway system	Omitted
	17.—Principal commodities carried by railways and the earnings therefrom during the year 1906	11
No.	18.—Analysis of working of each railway system during each half-year of 1906	62
	19.—Train and engine-mileage of each railway system	
No.	traffic	Omitted
	22.—Rolling-stock under different heads on each railway at the close of the year 1906	86
	23.—Rolling-stock. Number of, and outlay on, — at the close of the year 1996, and work done	90
	Ph.—Rolling-stock fitted with automatic brakes at the close of the year 1906	94
No.	Rolling-stock lighted by gas and electricity at the close of the year 1906	95
140.	communication throughout between passengers and guards and drivers on the 31st December 1906	96
Nσ.	25-B.—Statement showing the number of carriages provided with means of communication between passengers and guards and drivers on the	
No.	31st December 1906  26.—Railways on which points and signals were interlocked, and on which	96
	block instruments were used, for train signalling at the close of the year 1906.	97
No.	27.—Coal and wood fuel consumed by each railway system, price paid per ton and consumption per train-mile, etc., during the years 1902 to 1906	98
No.	28. Coal mined in India during the years 1835 to 1906	102
	29.—State collieries worked by railway companies or by the State	
	. 30 -Accidents and casualties to trains on railways treated as one system,	103
No.	during the years 1905 and 1906.  31.—Numerical return of servants of all races employed on each railway system (open lines only), and the amounts deposited by them in the	104
Nα	Provident Fund, at the close of the year 1906.  32.—Number of men enrolled in Railway Volunteer Corps on the 31st	106
	December 1906	108
	lines), and the amount of compensation payments on account of claims for goods lost or damaged for the year 1906.	109

### Appendices—concld.

	Fage.
No. 34.—Transactions of the Fine Funds for the year 1906	110
No. 35.—Railway and Railway Aided Schools at the close of the year 1906	111
No. 36.—Cost and particulars of some of the large railway bridges	Omitted.
No. 37.—Cost and particulars of some of the important railway tunnels	
No. 38.—History of open lines, and of lines under construction or sanctioned for commencement, on the 31st December 1906	112
No. 38-A.—Statement of railway and tramway projects corrected up to 31st December 1906	212
No. 39 —Total working expenses on the 5'6" and 3'3\frac{3}{3}" gauge railways during the year 1906, and the ratio between coaching and goods under gross receipts, total train mileage and gross ton-mileage.	216
No. 40.—Memorandum by the Railway Board on the results of Indian Railway working, 1906-1907, and proposals for 1907-1908	218
No. 41.—Terms on which the Government of India are prepared to consider offers for the construction of branch lines (Resolution No. 514 R. C. of 1896)	264
No. 42.—Communication between passengers and the guards and drivers of trains	275
No. 43.—Rules for the design and inspection of Signalling and Interlocking .	277
Diagram showing, for each year, the open mileage, capital outlay, gross earnings, and working expenses, also the percentage of working expenses on gross earnings, and the percentage of net earnings on capital outlay,	
from 1853 to 1906 Sec	in pocket
Migh of India growing rangery avalaged in to alst December 1900	attached to the cover.
Map showing the railway system of India corrected up to the 31st March 1907	

#### APPENDIX 1.

List of open lines of Railway at the close of the chlendar year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

			denote				LENG	S SO KI	ATIWAY,	IN MILP	R, OFF	и он 31 <i>1</i> Сильти	T DECE	MIFR I	wo6,	
Nu		Name of Railway.	usrd to of rai.way	Bailway administra- tion by which worked.	Date of first opening of any portion for	Gauge,	world ngor	lmes  u by  acy of	tend		Co- assist		and by 3 and well ency of	Native ked by	in foreign	Renares.
Main head.	Sub- head,		Letters		traffie.		blate rail- nay.	Com- pany,	roilway.	TAHWAY	w.y.	Plate at eff.	Ceno p. 05	State and bary	Lies in	
		A		1		-	İ							İ		
5	(b)	Agra-Delhi Chord.	A.D.C	Great Indian Penin- sula Ry, Co.	15-11 03	5' 6"		125:99								
2	(9)	Ahmedabad-Dholka	A. D.	Itombay, Baroda Central	23-2-03	3′ 37″				83:50						h
2	(h)	Ahmedabad-Paran-	A.P.	india By Co. (	1-5-97	3' 37"				51:70						Rebate lines.
0	<b>(</b> 6)	Amritsar-Patti .	1. Р. Т.	North Western State Ry,	21-9-66	5. 6"				27:19						<b> </b> ;
11	(11)	Assam Bengal .  Azhikal-Mangalote	A. B A. M.	Assam-Bengal By	1-7-95	3' 37"	ļ	775-26		-	1					
8	(6)	B		Madras Ry Co	21.9.00	5' 6"	ļ	56:35								·
24	(4)		В В.L.	Burgset-Basirhat Light Ry Co	1-2-05	2, 9.,				20-06						Subsidized by Distric
25	(41)	Barsi Light	В. І.,	Barsi Light Rv. Co.	1-3-97	2' 6"				78:51						Government land provide
22	(8)	Bellary-Rayadrug .	B. U.	Southern Mahratta Ry, Co.	1-7-95	3' 35"		33 35								free,
13	(a)	Bengal and Norts- Western.	B. A N · W	Bengal and North- Western Ry. Co.	.!- 1-H1	3' 3'''	٠٠	ļ		942 18						Government land provide free.
13	(a)	Beng il-Donars .	В. D.	) (	15-1-93	3' 31"				36.10	١.					Subsidized by District
13	(n)	Bengal-Pooars Ex-	В. D. Е.	Bengal Dooate			İ					ļ				tioard.
1	(a)	tensions Bengal-Nagpur .	B N.	Bengal-Nagpur Ry,	20-1 00	8' 3;" 5' 0"	<u> </u>	1,00 \$ 61	İ	116.20				""		Government land provide free.
8	(L)	Bezwaia Extension	B. E	Co. Nizwa's Guaranteed	10-2-89	5' 6"		20 58					-"		"	
		Bhavnagar-Gond d-		State Rys. Co.			ĺ	20 65	"					""		
14	(a)	Jung 14-Perband a	P	Physanager Gon by-   Jenagad-Porbandar   Ry.	20-12-80	૧. ત્રક્"						33419	"			Includes 5:23 miles of doc estate and quarry hues.
		(Bhopal-Hats) (British section).	i	{	1-6-52	6' 6"		13-11								
	(c)	Bhopel-Itarst	В 1.	]	15-11-x <b>1</b>	5' 6"	۱		<u></u>	ا			41:29		! !	
5	(J)	(Native State   Rection),   Bhopal-Ujjain .	) B. U	Great Indian Peninsula Ry.	11-11-95	5' 6"		ļ		]						
	(b)		J. B. B.	Jodhpur-Bikane: Ry	9-12-91							"	113.7	""		
18 6	(e)		1	Great Indian Penin-	20-9-05	3' 37"			i :		ļ	245 35	145.63			
22	(c)	Berur-Shinga .	B, S. G	ania Ry. Co. Southern Mahratta	1-12-99	3' 31"			-	1						
	(a)	Bombay, Baroda and	11 11 11	By. Co. Bombay, Ruoda and			l					i	37 02	"		
2	(4)	Contral India.	c. i	Central India Ry.	10-2-60	i. 4n		F01/35				Ì				Includes 39 23 mites of 3' 14" gauge bue between Viramgam and Wadh wan,
26	(a)	Bukhtiarpore-Bebar Light.	В. В.	Bukhtiarpore-Behar Light By. Co.	1-7-04	2' 6"				0a:81						Sabridized by Distric
15	(a)	Burma	в.	Burma Railwaya Co.,	2-5-77	3′33″		1,310-15			l	l	l	l		Board,
		C														
10	(e)	Cawnpore-Burhwal (metre gauge link).	с. в. м.	Ondh and Rohil- khand State Ry.	21-11-96	3' 93"	79:63									Excluden 3 40 miles of th Lucknov-Bare lly rail way between Ambing and Daliganj, worke
										,	1					over, but includes 16.7 miles of mixed (5'6" and 3' 3") gauge line be tween Burhwal and Bar-
_		Clark Bobs														Banki and C 59 inde of the Cawnpore Bridge of the Oudh and Robil khand State Bailway.
3	(1)	Conch-Behar	C. B.	Eastern Bougal State Ry.	15-9 93	2′6″								39 60		
27	(a)	Cutch	C.	Cutch Ry.	18-5-05	2' 6"						11.67				1
		D														1
9	(J)	Dandot Light .	D. L.	North Western State Ry.	6-7-80	2'0"	6.18							-		
35	(a)	Darjeeling-Himala- yan.	D. H.	Darjeeling-Hima- layan Ry. Co.	23-8-80	2'0"				51.00	<i>-</i>	,				Subsidized by the Local Government,
4	(8)	Delhi-Umballa- Kalka.	D. U. K.	East Indian By. Co.	1-3-91	5'6"				162:36						Subsidized by the Govern- ment of India.
16	(a)	Deoghur	D.	Deoghar Ry. Co	23-12-82	3, 31,,		·	` <b></b>	4'79						Government land provided
	1	l	1	1		1	l		II					l		free.

#### APPENDIX 1-contd.

List of open lines of Railway at the close of the calendar year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

			rent.				LENG	CIC OP HA	ILWAY, I	N MILER Raj. II ka	, OPRN	Crysathi on 3141	DECEMI	nen 19:	06,	
N t		Name of Radway.	5.	Padway administra- tion by which worked,	Date of first opening of any portion	tiauge.		lines ed 19	Gnares	Auniet-	Un.	51 ifes	wred by and work gency of	ci by	ngi a'a	Remarge.
Main :	Fur.		1,47,41		for traffic.		S. ate rul way.		tred	radway.	cd	Native		State ind- way.	I new B	
-				-	Ġ				,							·· - · · ·-•
		D—concld.			Brought	ferunci	65.75	1,563 67		1,542 (4		691 21	341-10	33 (70	• •	
11	13:	Phrangadia	DICE	Lhavragar Gerdel- Jun gan-Potnan ear Ry	1-6-9%	3' 3) '						2 (83		"		
17	(0	Dibru-baday c	1) 5	A son - Badways and Fronting Co	Aug 82	3.37"				17:50						Subsidized by Local Government.
		E		•												
		Fastein Borgil State-	•	) (												
		Behar, Kaunia- Dhohrt and Northern rec- tions.		•	24-6	3' 86"	635-30									
3	(81	British Section, 8 introbations— frieston—Port Ranaghert-Krich bagar—and Tee ta-Kirot gram orangher	[ 1' B	ha tem hoggi / State dy,	14751	3.6.	55-03									
,		Dacen section .	1 1 1 0		4 - F 2-1- 2	3' 32 '	85.92									
3	(a)	Crattal, Post in and Southern sections.	FES	1	2-1- 2	5' 6"	407 0.							•••		
4	(a)	East Indian	п. г.	Bet Indies By, Co	15.851	f'6"		2,165103	<b></b>							
		G														
2	n	Gaekwar's Dabber	d D	Ber bay, Bareda	847₹	2' 6"				,	•••		D14			
2	(0)	Gackwar's Mehant	G. M	Ind a Sy. Co.	21-3 %	3' 3"							92 63			
2	(1)	Godher-Putlim- Negda,	G R N		16-1 99	5/ 6 /		141 14	•••		•••	•	•••			
5	(a	Geest Indam Penar sula:	, 1. ೪,	Great Judien Penus vula Ry Co,	18 473	5' 6"		1,561.63			•••					
22	(a ;	Guntakal-Mysori Sreatiet,	а. <b>ч.</b> г.	South on Mal ratta By. Co.	1-1-12	3': ặ"		110 50	<b></b>							
5	6)	Gwaher Light . <b>H</b>	G, 1	Great Ir dian Penin- sula hy Co.	2-12-(10	2' (.#						<b></b> .	183.23			
10		Hardwar-Dobra .	11, 1)	Oudh 194 Relat-	1-1-00	5' 6"			92 C4							Consented on ton order
				kband State Ry.	15-12-92					•		•••	£1.05			Guaranteed under modern contract.
22		Hindapur (Yestant pur-Mysoro I ten tier).	н,	Southern Mahinita Ry {		3 3&"							51:35		•	
22	( <b>f</b> )	Hospet-Kottur .	u. K.	, (	1-4 05	3'31* '		46 03	•	•••	•••		•••		••	
36	(a)	Hourah Amia Light.	H, A.	Howrah-Amta Light Ry Co.	1-7-97	2′0″				37 19	•••				•.•	Subsidized by District Board.
37	'a)	Rowrah-Sheakhala Light.	н. в.	Howrah-Shenkhala Light By, Co.	2-8-07	2′ 0″				10.75	•					,
8	(c)	Hyderabud-Goda- vari Valtey,	11.G. V	Nizam's Guaranteed State Rys. Co.	21-10-69	a' 3 <b>1</b> '					•••	•••	391-13	٠,,,,		Includes 5.83 miles of mixed (5' 6" and 3' 3\$") gauge line between Hyderabad and Secure
c	(F)	I Indiau Midland .	1. м.	Great Indian Ponin- sula Ry. Co.	10-1-78	5′ 0*		809-85			***					derabad over which the Nizau's Gueranteed State railway trains also work.
					Carried	over 🕳	1,357*07	9,406-86	89-04	1,676-48		612 04	1,154-22	83.60		

#### APPENDIX 1-contd.

List of open lines of Railway at the close of the calendar year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

<b>.</b>			denote				Lang	ги ор к Смо		EATE WE	1, 0)°E;	N 04 316	T DECEM	nes lt	ю,	
N U B		Nume of Railway.	ns-d to d of rishways.	Railway administra- tion by which	Date of first opening of any	Gauge,	State   works	ed by	Guarun-	Assist-	Un-	States	ened by l and work	Native led by	furega	Remarks.
Meru bead.	head.		Letters no Lativis of	worked.	portion for traffic.		State 1 al- way.	Com- pany.	terd railway.	ıd ratiway	ed rail- wsy.	Native State theif.	Com- pany,	State ruit- way.	I mes in tectiory.	,
		J			Brought	orward.	1,357 07	0,404.56	32 04	4,670 45		612 04	1,104 22	39-60		
2	(ر.	Jaipur (Siwai Ma-	J. S. N	Bombay, Baroda and Central India Ry.	10-11-05	3′32′				<b>\</b>			32:15			
D	(e)	Jammu and Kash mir ( vative State section).	J. K.	Co. North Western State	15-3-60	5' 6''								15 99		The British section of this railway forms an integral portion of the North
14	(e)	Jamuagar	J. N.	Bharnagar Con-	5-1-97	3' 24"			•••			512:				Western State milway, Includes 3 93 miles of
14	(d)	Joinlan-Rajkot .	J. R.	Porbandur Ex.	12-4 %4	3, , 7,,						16 21				dock estate lines.
18	(a) (+)	Jodhpur Jodhpur-Hydera- bad (British sec- tion).	J. B. J. H.	Jodhpur-Bikaner {	24 6 52 18 8-9.	2, 3*		 123 ( n				163**0				Worked by the Jodh- pur Biksner railway, The Native State-section
38	(a)	Jornat	Л.	Jordat By	15-12 #1	2. 0"	31.75			l		•			١	of the railway forms an integral portion of the
1	(6)	Jubbaly ore-Gouder Extension.	J. G. E	Bengal-Nagpur By	18 4 03	7. 6.,		245 05								Jodhpur fullway.
30	(a)	Katka-Simba	кѕ	Pelhi Umball.	9-11-63	2. 6		5014		Ī	'	]				
21	(b)	Karaikkai-Peralam	к. Р.	Kalka Ry Co. South Indian Ry.	14-3-96	3, 37		<b></b> .							14.65	Ī
9	(h;	Khashalgath-Ke hat Thal,	к, кт	North Western State Ry,	28 5 9 1	2 6"	<b>91.7</b> 3									l
6	(e)	Kolar Gold-holds .	K G	Madras Ry C.	1.0 1	5 6							9-8			ł
22	(y)	Kothapur , . L	K L.	Southern Mahratta Ry, Co.	21-4-91	3′32″						"	20 27			
17	(i)	Ledo and Tikak- Margberita Col-	L. T.	Assam Radways and Trading Co.	17 2-84	3 /4"			-		8 60					
20	(L)	bery Lucknow-Bare, lly	L. B	Rahilkund and Ku- maon Ky, Co.	12-10-4	3 57"		237:04								
v	(d,	I ndhiana Dhuri- Jakhai, <b>M</b>	L, D. J	North Western State By.	10 1.01	5'6"				-				79.65		
6	(a)	Mudras	M.	Madras Ry. Co. {	1756	5' 6"			904:61							buranteed under old con-
6	(d)	Midras (North- East line).	M.N.E.	) saucias ay.eu. Y	20-2-93	5' 6"		497 19					-			theredies 1-99 males of in xed 65 of and 3 240 gauge line between Bea- we do and kitten Block had ned 1-08 miles of 3 847 gauge line between leater, Block hat and
	(g)	Morappur-Dhar-	M.D.	Madias Ry. Co	14100	2' 6"	_	18 63								Tadepald.
19	(a)	mapuri. Morvi	M.R.W	Morvi Ry.,	11-3-46	3' :}"						7101	,			•
1	(e)	Mourbhauj	M.B	Bengal-Nappur Ry	1 24-3 87				-::			20 70	32:41			
9	(c)	Mymonsingh Jamal- pur-Jagannath-	M.J.J.	Esstein Bengal	15-10-94	3.38,		٠٠.	¦	63-22						Rebate line.
22	(h)	kauj Mysore-Nanjangud	M.N.	Southern (	1 12 91	3'81'							15 90			
22	(+)	(Bouthern Man-	M.S.	Mabratta {	1-2 81	3':{"		296 23								
2	(0)	<b>N</b> Nagda Ujjuin .	N. U.	Bombay, Raroda and Central India	15-7-96	p, c	l	l					34 34			
6				Ry Co.	1	1	}							1		
8	(a)	Nilgiri Nizam's Guaran- terd State.	N. N. G. 8	Madras Ry. Co Nigam's Guaranteed State Rys. Co.	55 6-09 9-10-7 t	1							330**13	-		Includes 5'8? miles of mix- ed .5'8" and 3'3'") gauge line between Hydernbad and Secunderabad over
9	(a)	North Western State,	N.W.		13-5-61	£, e,,	3,371.71						:-	-		which the Hyderabad- Godavari Valley railway trains also work. Includes 5 c3 miles of mill- tary line not used for
				North Western												public traffic and 36 28 miles of mixed 8' 8" and 3' 3\frac{2}{3}" gauge line between blatinds and tot kapura, over which he stalputana-Malwa railway
	Ø	Nowshera-Durgal .	N.D.	.  ]	1-1-01	2′ 6′′	49.23				-				-	trains also work.
10	(a)		0. & R	Oudh and Robil- khand State Ky.	29-1-67	5' G'	,212-50		-					-		Includes 16:79 miles of mixed (5' 6' and 3' 8\frac{2}{6}' and 3' 8\frac{2}{6}' and Burb wal and Bars Banki and
		·														3:59 mile on the Cawnpor Bridge and 1:81 miles o 3'34" gauge, between th Oudh and Rohilkham State railway canton ment and the Bongal an
	١	1			Carrie	d over	6,108.0	7 10.903	30 986	5 1,729-7	0 8.8	0 1,271 0	0 :,638-2	1 129-2	3 14-8	North-Western railway

#### APPENDIX 1-concld.

List of open lines of Railway at the close of the calcular year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

	7	1	<i>3</i> 9.		1		1			F 101 by		o= 11 ou	lin			l
Nσ			den. te		Date of		LENG	URO	LE REAK	AL HELD	ROFC	on 31 sy	TION,	ER 1914	٠ <b>.</b>	
35		Name of Railway.	uced to of railways.	Railway administra-	first opening of any	t lanua	State Works	ed by			Un-	States	vued by I and work	Vative ed by	foreign	Вкиляць.
	-	Name of Manway.	of ra	tion by which worked.	for for traffic.	Ciange.	<b>ъg</b> en	., 61	tiuaran- teed railway.	i ed j	ansi-t ed inil-		genay of		a 1.	HARREN.
kerd.	Pead.		Letter- names		erame.		Sinte ran- way.	Con- pany			way.	Native State itselt.	Com- pany.	State rail- way.	Lines i	
		P			Brought	orward.	- 6,105 07	10,903*3	936 05	1,729.70	H 50	1,271.00	1,638 21	125.24	11.62	
2	(k)	Palanpur-Decka .	r. D.	Rombay, Baroda and Central India	B-11-93	3' 3'		17·2H								This line is the joint was
1	(d)	Parlakimedi Light	P.L.L	Ry. Co Bengal-Nagpur	1.4-00	2' 6''				ļ	٠,,		24.03			This line is the joint pro- perty of Government and the Palaupur Dur-
2	(a)	Petlad- C a m b ay (Anand-Tarapur	P.C.A.	Ry. Co.	5 5-90	5' A''							21.20	!		bar.
2	(e)	section). Petlad Cambay	P.C.T.	Bombay, Baroda ( pud Central ( India Rv. Co. (	20-6-61	5' 6"				'			12:30	! ! :		
		(Ta. spur-Cambay section). Pondicherry	P.	South Indian Ry.	15 12 70	3' 3"."	l			Ì						
21 20	(c) (c)	Powayan Light .	P.W.L	Co. Bolelkund and	15-12-79	2' 6"	<u> </u>			39 50					7 95	,
	"	R		Kumaon Ry. Co.			l									free.
1	(e)	Raipur-Dhamtari .	R, D.	Bengal-Naspur Ry.	10-9-01	£ 6"		56:94								
2	(o)	Bajpipla	R.	Bo obay, Barada and Central India	1-7-07	2' 6"			;				37:37			
9	(+)	Rajpura-Phatin-la	в. в.	Ry Co North West rn State	ıl .	£ 0.0.								107 05		
2	( <i>u</i> )	Rajputana-Malwa ,	В. М.	Ry. Lombay, Earoda and Central India Ry.	14-2-73	3' 32"		1,774:30							i	Includes 2:10 miles at Ui-
				Co.												jam, 3 of miles between Arra cantions in and Agras Arra Cantions in and Agras of the Back stations and 6 94 mile between Lahori tate cabie and Brewery calin at 1 CHa, 1 and 5 and 126 28 miles of mixed (6, 6° and 3' A.2') jauge time between Bhattinda and Kot Kapura over which the North Western State railway trains also work.
20	(a`	Robitkund and Kumaon. S	к. & к.	Robilkund and Kutmaon Ry. Co	12-10-84	3′ 32′				117.87				 		Sub-Plized by the Govern- ment of India.
6	(f)	Shorabur Cochin .	F.C.	Madrie Ry, Co	2-6-02	3, 33 ,			1				G4:75			
4	{c,	South Behar	S. B.	East Indian Ry. Co.	ì	1				78 76						Rehate line.
21	(0)	South Indian . Southern Wahratta	5, I, 8, M.	South Indian Ry. Co	1			1,130.00	1							
23	(u) (f)	Southern Punjab .	8. P.	Ry. Co.	10-11-07	1				425 33					i	
9	(g)	Southern Pumph "Ludhiana" Ex- tersor.	S P. E	North Western State Ry	10-6-46	5' 6"				155 05		-				Rebate line
21	(d)	Tanjora District	г. в	South Indian Ry. Co	2-4-91	3' 3#2'				103 36						
2	n	Tapti Valley .	r. v.	Bombay, Baroda and Ceptral India	1-12 98	5' 6"				155148						Rebate line.
33	(a)	farake-hwar-Magra Light.	В. Р.	Ry Co Bengal Provincial Light By, Co.	7-11-94	2' 6"					33 27					
4	(d)	Tarkessur .	T.	East Indian Ry Co	1 1-85	5' 6"				22:23					١	Government land provided
88	(u)	Tezpore-Balipara Light,	т. в.	Tezpore-Balipara Light Ry. Co.	8-8-91	2' 6"				20.10						Sobsidized by District
34	<b>(</b> a)	Thaton-Duyanzaik Light.	T. D.	Thaton-Duymzaik Light Ry. Co.	11-3-85	2′ 6 ′				7:78						Board. Sub-idized by Local
21	(4)	l'innevelly-Qui'ou	г. Q В		1 6-02	ระกฎ"	<b> </b>	56 48							۱.	Government.
		(Travancore) (Bittish section), Tumevelly-Quilou,	T. Q. N	South Indian			1		İ					į		
21	(1)	(Travancore) . Na- tive State section		٠ ١	1-8-03		1						57 98			
19 0	(6) (4)	Tirboot State . Tirupattur-Krish-	Т. в.	Bengal and North- Western Rv. Co. Madras Ry. Co.	1-11-75	1 .		35 39			"					
٠	)	Dagiri.					"				1		"			}
	١.	The same Children		Mainm Chu - D				Ì								
23	(a)	Udsipur-Chitor . V	v.c.	Udaiper-Chitor Ry.	1-8-95	3'3["	-			-		67:30		"		1
2	(m)		v.K.K.	Bombay, Baroda and Central India By, Co.	10-0-02	3'3{"		-					41:37			
23	ဟ	West of India Portuguese.	W. I. P	Southern Mahratta R; Co.	17-1-97	3' 34"	 								51-10	
		Total mileage of rai 31st December 199	iways op 16,	on in India and Burn	os on the	5' 0" 3' 3\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	797 91 147 01 37 93	105.31	===	1,530 08 190 43 107 94	8·60 33·27	1,305-93 32-37  1,838-80	914:38 169:68 163:53	33.60		
p <sub>e</sub> ja.es	Ĺ	31st December 19	)6,	ON TO LOUIS WHILE DATE	oo on the	2'0"	37.93	.		107-94			183-53			

### APPENDIX 2.

Mileage added to the Railway System of India during the calendar year 1906 and the following three months.

Nu	MBER.	Reilway administration	Name of	Section of line	Date of		Appr	TONE, I	N MIL	ILES, MADE TO OPEN MILEAG DURING 1906.			
Main	Sub-	to which rail- way has been added.	owning railway.	added during 1906.	Opening for traffic.		Lor	gth.		Total	milenge 'a <b>y a</b> dmir	added to	rail-
hoad.						5′ 6′	3' 3)'	2′ 6″	5. 0.	5′ 6″	3' 3‡"	2' 6"	2' 0'
1	(6)	Bengal-	Jubbulpore- Gondia Ex- tension.	Chhindwara to Khirsadoh	15th March 1906	•	 	16 28					
	(e)	Nagpur.	Raipur-Dham- tari.	Rajim to Rajim Town	13th May 1906			0.78				17 06	<b></b>
2	(0)	Bombay, Baroda and Central India.	Petlad-Cambay (Tarapur- Cambay sec- tion).	Canbay to Cambay Bandar	1st March 1906	1.08				1.38			
	(b)	1	Eastern Bengal State.	Golokganj to Kokrajbar	1st February		35.75				1 , !		
3	(c)	Eastern Bengal State.	Mymensingh- Jamelpur Jagannath- ganj.	New line hild at Jagon- nuthganj.	1st December 1906.		2:53				38:28		
			[	Bhongaon to Fernkhabad	1st January 1906.	27 06	· · · · ·						
4	(~)	East Indian	D. A. E. Nam.	Dhanbaid to Peharpur	6th December 1966.	163 71	; ···						
•	(a)	Fast Indian	East Indian	Ondal to Sainthia	10th December 1906.	42 94	· · · ·						
				r'charpur to Maupur Tetulmeri to Kusunda .	15th August 1906.	17 42				!			
				The state of the s	6th December 1906.	1 59		١.,		192.72		•••	
_	(6)		Agra-Dolhi Chord.	Kom to Sanket	21th February 1906.	5.82				1			
. 5	<b>(f)</b>	Great Indian { Pouinsula	Indian Mulland	Romaining portion of the Agra-Balinganj Branch.	27th Fobruary 1906	1:75	: !			7.70			
1	ı		r	Azhikal to Hosdrug	21st August	34.52	i						
1	( <b>l</b> )		Azhikal-	Hosdrug to Kararagod	1906. 1st October	14 22				,			
1.		Madras <	Mangalore.	Kasaragod to Kumbla	1904. 17th November	7 62		"					
	(g)	Į.	Morappur- Dharmapuri.	Moraspur to Dharmapuri	1906. 17th January 1906.			18 53		<b>5</b> 6 36		18.53	•••
	(11)	ſ	North Western State.	Snorkot Road to Sargeda	14th May 1906	108:11						,	
- 1	(b)		Amitear-	Amritsar to Tara Taran	21st September	11.50						. i	
9		North West- ern State. ≺	Patri.	Tarn Taran to Patti	1906. 30th December 1906	13:29							
	(g)		Southern Pun- jab " Ludhia- na " Exten- sion,	MacLeod Ganj Road to Ferovepore City.	10th February 1906.	78 00				208 63			
10	(a)	Oudle and Robilkhund State.	Ondh aud Rohilkhand State.	Phaphamau to Mariahu	18th June 1906	47 51				47:51			
1	(a)	r	Bengal and	Barhm to Tulsipur	15th January	!	22 54				1	i	
	`	il	North Western	Chainsara to Jarwa	1906, 12th April		9 47					1	
12		Bengal and North	4	Paleza Ghat Shift No 68	1906. 181 January 1906	!	0 76					1	
		Wostern.	11	Barare to Bhagalpur Kachery.	15th March 1906.	.	3.20	.				-	
	(b)		Tirhoot .	Bettiah to Narkatiaganj	17th January		:3.73	-					
				Narkataganj to Blokua	1906 17th February		21.50	ĺ			81 50	İ	
20	(a)	Rohilkund	Rohilkund	Thoree. Bareilly to Seron	1906. 29th January	ļ			.	•-•		"	•••
	(a)	and Kumaon.	and Kumaon South Indian	Pamban beach to Rames-	19 6.		55 <b>8</b> 0				55.80		•••
21	(d)	South Indian	Tanjoro Dis-	waram. Arantangi Quarry Branch	1906. 25th June 1906		6.95					}	
22	(f)	Southern Mah-	triet Board. Hospet-Kot-	Ramandrug to Ramana-	let December		8·90 4 97				10 85		~
		ratta.	tur.	malai. Barsi Road to Fandharpur	1906.		- 37				4 97		•••
25	(a)	Barsi Light	Barsi Light	Kuslamb to Tadwale	2nd December 1906. 1st May 1906			30·21 20·36	<u></u>			50-57	•••
	1	1		i					ŀ				
'			i		Total mileage a	dded c	luring	1906 '		514-30	191:40	86.16	•••

#### APPENDIX 2-concld.

Mileage added to the Railway System of India during the calendar year 1906 and the following three months.

<b></b>		Pathar				Aı	orrigo	NB, IN	MILES DUR	, MADE 1906	O OPEN	MILEAG	6
Nox	BER.	Railway administration to which rail- way has been added.	Name of owning railway.	Section of line added during 1900.	Date of opening for traffic.	-						ded to ration.	sil•
ain ad.	Sub- hoad.					5′ 6″	3' 34"	2′ 6″	2′ 0″	5′ 6″	3' 3}"	2' 6"	2′ 0″
		MIL	FAGE ADDI	ED FROM THE 1st J.	ANUARY T	о тн	E 31	st M	ARCE	I 1907	•		
		]	S	Bhojadih to Gomoh	1st January 1907.	25.64						ļ	
1	(a)	Beugal-Nagpur	Bengal-Nag-	Branch line near Khanoodih	1st January 1907.	1 97							
•	(6)	Jema-Hagpin	Jubbulpore- Gondia Ex- tension.	Khirsadoh to Barkuhi	21-t March 1907.			5.72		27:61		5.72	
3	(a)	Eastern Ben gal State.	Fustern Ben- gal State.	Tiljala to Kukurgachi	let February	2.25				2 25			
5	(h)	Great Indian Peniusula.	Matheran	Noral to Matheran	22nd March 1907.				12:61			••••	12 <sup>-</sup> 61
	(a)	{	Madra*	Basin Bridge to Washer- menpet.	15th March 1907.	1.00							
6	(4)	Madran {	Madras (North East line).	Basin Bridge to Korruk- kuppet(ar	15th March 1907.	0.85				1 85		•••	
7	(a)	Nagda-Muttra	Nagd s-Muttra	Kotah to Baran	20th February 1907.	10.00				40.00			
10	(a)	Ondh and Rohilkhand State.	Oadh and Robilkhand State.	Marishu to Zafarabad	1st January 1907.	10.67	•••			10.67			
12	(4)	Pengal and North Wos-	Bongal and North Western	Gorakhpur to Chhitauni Ghat	7th February 1907.		60-91						
	(6)	teru.	Tirhoot	Bhaptishi to Makhana Bazar,	1st March 1907		41 33				105.27		
							 						ļ
						•							
				1									
						Ì							
				Total mileago added fr	om let January t	 	     Jarch 1	    907		82:38	105-27	5.72	12.61
				GRAND TOTAL MILES	GE OPEN ON TE	ie 31sr	MARC	н 1907	•	15,680-0	8 12,254.67		-

### APPENDIX 3.

Total Railway mileage opened for traffic during, and at the end of, each year, and the total mileage opened during the Viceroyalty of each Governor General.

				guity of each Governor General.
Calendar Year.	Not mileage added during the year.	Total mileage open for traffic at close of the year.	Total mileage opened during Viceroyalty.	Viceroys.
1858 1864 1855	20 81 98	20 71 169	} 169	Marquis of Dalhousie.
1856 1857 1868 1859 1860 1861	108 18 140 198 218 749	272 287 427 625 838 1,587	1,418	Earl Canning
7862 1863	746 174	2,988 5,507	} 920	Earl of Elgin.
1864 1865 1860 1867 1868	481 405 200 366 79	2,9 <b>5</b> 8 3,363 3,563 3,929 4,008	1,501	Lord La wrence.
1869 1870 1871	247 516 303	4,288 4,771 8,074	} 1,066	Earl of Mayo.
1872 1873 1874 1875	295 328 529 315	5.369 5,697 6,226 6,541	) , 1,467	Lord Northbrook.
1876 1877 1878 1879 1880	319 460 899 275 668	6.860 7,320 8,219 8,494 9,116	2,621	Lord Lytton.
1881 1882 188 <b>3</b> 1884	728 289 309 1,173	9,890 10,149 10,458 11,631	2,469	Marquis of Ripon.
1885 1886 1887 1888	652 609 1,211 473	19,288 12,892 14,103 14,576	2,945	Earl of Dufferin and Ava.
1889 1890 1891 1892 1893	1,811 814 907 807 689	18,887 16,401 17,308 17,818 18,804	3,928	• Marquis of Lansdowne.
1894 1895 1896 1897 1898	996 647 707 861 925	18,900 19,847 20,284 21,115 22,040	3,536	Earl of Elgin
1899 1900 1901 1902 1908 1904	1,483 1,229 , 611 868 1,025 609	23,523 24,752 25,363 25,931 26,956 27,665	6,255	Lord Curzon.
1905 1906	730 802	28,295	802	Earl of Minto

### APPENDIX 4.

Numb	DRR.	Railway administration	Name of		Section of line,	Date cou-	MIL AND TO	STUL	BANCT BEMA NETRO	INING	
Main lead.	Sub- head.	by which being constructed.	owning Railway.	Classification.	of which has been same- tioned.	struction was	5′ 6″	3, 31,,	2' 6"	2' 0"	Remarks.
	<b>u</b> n •			(	Bhojudih to Gomoh	1st November	25:61			•••	Since opened.
					Branch line near Khancodih.	1901	1.57				Since opened,
	(a)	1	Bengal-Nappur		Kamptee to Ramtek	18th August	14 74				Work commence
				by company.	Kandri brauch	1906. 13th August 1906.	2 53				Work commence
					Viziansgram to Rai		310-62				Work commenced
				l	Sini to Garamaishin	19th October 1906.	44.00			•••	Commencement work not auth
1		Hongal-Nag. ≺		ĺ	Khirsadoh to Bar- kuhi.				5.72	•••	rized. Since opened.
-	(b)	pur.	Jubbulpore- Goodia Exten- sion.	State line worked by company.	Khirsadeh to Sirgera,				7.76		Work commence
			•	!	Nainpur to Mandla	23rd January			32.14		Work o mmence
			Gendia-Chanda	State line w wheel	Gondia to Clainda	1901   26th August   1904.			1 18 65		Work commence
	(/)		Extension	State line worked   by company	P um (Bramapuri) to Sampur.	: 6th August : 1904.			63.75		N ork commence
	(g)		Parulia-Ranchi	State hue worked by company.	Purulia to Rapoh				72.28	•••	Work commence
i				by company.		l'otal	: 99 50	,	330 30		·
				1	Chanasma to Bech-	1	ļ	16 74	<del></del>		Work commence
	(i)	!	Guekwar's Mob	Native State line	raji.	Lette to no 1988		7.73			Work some
2		Bombay,	sana.	hank to com.	Kher du to Publicia Manual Road to		1	21 37			Work commence
		Barods and Central		l	Harij.		j				
	(j)	Indu	Jaipar (Siwai- Madhepur).	Native State bue worked by com-	Nawai to Siwai Madhopur	2nd Decomber 1897.		10 65	<u> </u>		Work resumed.
				pany.		Total		86.19			
					Kakurgachi chord .	1902	1	1			Since opened.
	(a)		Eastern Bengal		Laigela to Laigola Ghat	23rd Septem- ber 1103.	2.75	'  "			Work commoned
			State.	by the State.	Durgapur Chur hu		3:89			•••	Work commone
3		Enstern Bon gal State.			Forbesganj to the Nepal Frontice	27th Jun- 1905.		7:40	·		Work commence
		1.			Katihar to Goda	th Februar	у	105%			Work commence
	(6)		Fastern Benga State.	by the State.	Kokrajhar to the Brahmaputin rive opposite Gruhati	er, 1902	-	115%	7	:	Werk commend
					()	Total	8:39	228.2	7		-
					Agra direct acces	22nd May	1 7	5	-	- <del></del>	Work commeno
					Barharwa to Katwa	1995   5th March   <b>19</b> 03.	99:14	1			Work commono
						i 25th Febru	-   31.0			٠	Work suspende
					Bornchuk to Sode	ary 19 <b>0</b> 5.  - 11th July	1	ì			Not commenced
				1	pere   Cherlline between   the Cast India		1:1:	le			Not commenced
					and Oudir and Ro hilkband Stat	-					
4	(11)	East Indian	. East Indian .	State line worked	Barlways nea   Mogled Sarai	r				1	
		1		by company.	Obet line f Dholoan	5th Marc 1906.	lı 1·0	6			Work commend
					Ghat hee to Saju	n- 5th Mare 1908,	1	1		· ···	Work commend
					Hooghly to Katw	1905,	1		"		Work suspende
		1			hhuga to Hapur Teps-i to Bar:	13th Jar uary 1904. 18th Septem	1	.	"	•••	l.,
					he ni.   Mule 1704 from	ber 1906	1	1	-		Work abandon
					Howrah on the Jimrit branch to Chandore.	o 1903.	İ				
					1		_		_	<u> </u>	-
	İ		1		Cornial case	Total	-		76 380		-
	1	1	1		Carried over .	"   ""	1000.0	1 019	0 000	30	1

### APPENDIX 4-contd.

Num	BER.	Railway		j.	Section of line,		AN	HAGE DATL	. REMA	INING	
Main hoad.	Sub-	administration by which being constructed.	Name of owning Railway.	Classification.	the construction of which has been sanc- tioned.	Date con- struction was sauctioned.	1	3′ 34″	1	2' 0"	Bemarks.
	nonu.							"			No contribution in the contribution of the con
					Brought forward	 17th Folgu-	600 <sup>-</sup> 61 6-87	314.76	1		
	(a)	ſ	Great Indian Peninsula.		Kurla to Mazagaon  Mahim link	ary 1905.	1.32				Work commenced
			7 CHRISTIE.	by company.		ary 1905.	37:59			•••	Work commenced.
5	(g)	Great Indian { Peninsula.	Gwalior Light	Nativa . State line	Warora to Balhar- shah. Sabalgarh to Shin-	22nd January 1904.				66/29	Work commenced, Work commenced,
	(9)			worked by com- pany.	pur	1901.	"			10.0	Work dominenced,
	(h)	į	Matheran	Assisted Company's line receiving land only from Govern	l]	20th June 1904.				12.61	Since opened.
				mont.		Total •	45:78			79:00	
	(a)		Madras	Company's line	tion to Washer	1901	1.00	.:			Since opened.
	(b)		Azhikal Manga- lore.	old contracts.  State line worked by company.	monpet. Kumbla to Mauga	28th June 1903,	20.91				Work commenced.
6	(d)	Mudra~ ≺	Madras (North- East line).		Basin Bridge Jone- tion to Korakku-	11th April	0:85				Since opened.
	(+)		Nilgiri	State line work.	Cooncor to Octava- mund.	6th November 1903.		11:75			Work commenced.
	(1)	į	Salem-Attur .	ed by com-	Salem to Attur	16th September 1903.	36 06				Commencement of work not author-
						Total	58:82	11.75	<del> </del>		ieed.
				ſ	Crossing of the	let August	190.07				Work commenced.
7	(a)	Nagcia-Muttra	Nag-in-Muttra	State line worked	Muttra. Kotah to Baran	26th January	10.00				Suce opened.
				by the State-	Nagda to the cross- ing of the Chambal		141 13				Work communced,
				į	river.	Total .	380'50	<u> </u>			
			:	ſ	Kacha Gurhi to mic 22:50.	11th July 1905	22 50				Work commenced.
					Khushalgarh bridge and approaches.		3:63				Work commenced.
	(o)	ſ	North Wostern	State line worked	Lodhran to Khane-	17th March 1906.	56 59				Work commenced.
			Stato.	by the State.	Shahdara to Sangla		55-57				Work commenced.
	•				Shorkot Road to Chicheki.	21th July 1906	130065				Work commenced.
9		North West-		Ĺ		•					
,	(k)	ern State.	purthala-Sul- tanpur (Bri-	State line worked by the State."	Jullandar to the British Frontier	7th Augu⊲t 1903.			6.80		Commencement of work not yet authorised
	( <i>l</i> )	<u>.</u>	tish section) Jullundur-Ka-	Native State line		7th August			23 02		and question of gauge not finally settled.
		ÿ.	purthaliSul- tanpur (Native, State section).	worked by State Agency.	1 1 its-h Frontier.	1903. Total	16.898		20,00		
				ر	Balamau to Sitapur		37:12		26.82		Commencement of
10	(n)		Ondh and Rohil-	State line worked	Mariahu to Zafara-	ber 1906. 2nd October					work not antho- vised. Since opened.
		khand State.	khand State.	by the State.	bad. Rosa to Sitapur	1903. 23rd Octo-	<b>5</b> 1·36	,			Commencement of
				9		ber 1906.	99-15				work not authorised.
			. ]		Carried over	Total	1819-80	826·51	359°12	 79:00	
											,

#### APPENDIX 4—contd.

Num	BEB.		1	i		v		FAGE 8/			
		Railway administration by which	Name of owning	Classification	Section of line. the construction of which has	Date construction was		E CONS			Bemarks.
Main head.	Sub- head.	being constructed.	railway.		been same- tiosed.	sanctioned.	5′ 6″	3.8}"	2' 6"	2′ 0″	DEMARAS.
					Brought forward	•••	1 <b>,61</b> 9-80	326 51	359.12	79:00	
				(	Akhaura to Ashu- ganj	22nd May 1905.		19.00			Work commonced.
11	(u)	Assam-Bengal	Aьчып-Bongal	State Fire worked (	Kalaura to the Khoo- scura rivor.	3rd March 1906. Total		16:00			Not commenced.
						,		35.00	<del> </del> -		
					Burhwal to Sitapur Daronda to Maha-	26th October 1906. 28th Septem-		59.79			Not commenced. Work commenced.
	(4)	(	Bengal and North-West-	Assisted company receiving land	rajganj.	ber 1904.		3.90	"		• !
			ern.	only from Gov- ornment.	Gorakhpur to Cohitanni Ghat.	31st March 1903.		60.91			Since opened.
12		Bengal and Norsh-West-≺		, (	Savan to Thawe . Bairagnia to Narka-	2nd November 1904. 23rd Septem-		17:83			Work commenced.
		orn.	•	, i	ting.nj.	ber 1903.	"	58.05	"		Work commenced.
			Tirhoot State.	State line worked {	Bhagalpur Kachery to Bhagalpur .	17th January 1905.		0.79			Work commenced.
	(6)		THEOD TOUCH.	by company.	Mane i to Bhaptiahi	23rd Septem- ber 1903.	1	60.37			Portion since open-
			1		Narkatiavanj to   Bagaha.	23rd Septem- ber 1903.		26 24			Work commenced.
				l	Sahar-a to Murhganj	23rd Septom- ber 1903.		18 61			Work commenced.
	1					Total .		306.25			j
		١,	Burma	State line worked	Neikbau to Begayet	1st June 1906,		66 25			Work suspended.
	(a)		Dittina	by company.	Themaing to Mala-	18th October 1995.		6 70			Not commenced.
15	(b)	Burnia	Barma Exten-	State line worked {  by company.	Henzadı to Kyangin	19th April 190;		65 66			Work commenced.
		Ì	0.020	(	Pegu to Martaban	27th Novem- ber 1903.	<u>  -:-</u>	121-27		<u> -:-</u>	Work commenced.
17	(a)	Dibru-Sadıya	Dibru-Sadiya .	Assisted company, subsidized by Local Government.	Talap to Saikhoa Chat.	Total 11th May 1905.	<u></u>	259:88 8 52			Work commenced.
20	(a)	Rohilkund and	Rohilkund and	Assisted Com-	Lalkua to Kashipur	Srd July 1903		36.43		]	Work commenced.
		Kumaou.	Kumaou.	by the Govern- ment of India.	Moradabad to Ram- nagar.	3rd July 1903		47 69			Work commenced.
	1					Total .		84-12	-		
	1			ſ	Portion of the Ram-		Ī	3.17			Work commenced.
21	(a)	South Indian	South Indian	State line worked	esh caram exten- sion. Tangachimadam to	ber 1904. 16th Septem-	İ	1:71			Work commenced.
	""			by company.	Port Ampthill Tirupachetta to	ber 1904. 21st April 1599.		9 00	1		Not commenced.
					Sivagunga.	Total .		13.88		-	-
	(k)	,	Bezwada-Ma-	District Board's line	Bezwada to Masuli-	20th Octobor		49-17	1		Work commenced
22		Southern- {	subpatam.  Kuruool Road- Kurnool.	State line worked by company.	patam.	1905.	"	32:00	İ		Work commenced.
	(m)		Sangli		Miraj to Sang)i Town	1	í	5 77			Work commenced.
						Total	<u> </u>	87:24		<del> </del>	1
27	(a)	Cutch	Cutch	Native State line worked by Native State.	Anjar to Bhuj	29th May 190			27 38	3	Work commenced.
28	(u)	Dholpur-Bari	Dholpur-Bari	Native State line worked by Native State.	Dholpur to Barı	14th November 1905.			19:21	5	Work commenced.
28	(a)	Dwara-Therris	Dwara-Therria Light.	Assisted company	1	1	1		13.20	o	Work suspended.
		J. G. W.		only from Gov-	Maolong to Therri		2		6.00	<u> </u>	Commencement of work not authorised.
					Cumind	Total .			19:50	-	-
	1	1	1	l	Carried over		1,519.	1,121	422.8	5 79.00	<u>'l</u>

#### APPENDIX 4-concld.

				518t A	arch 1907.						
Nom	BBR.	Railway administration	Name of	·	Section of line, the construction	Date con-	AN	1,113.8	SANCTI . REMA! STRUCT	NING	
Main head.	Sub- bead.	by which heing constructed.	owning railway.	Classification.	of which has been sauc- tioned.	atruction was	5′ 6″	3' 3£"	2′ 6"	2′ 0″	Bemarks.
warr-tra-	-		7		Brought forward		1,619-80	1,121 6;	425.25	79.00	to I all a Debrohance and the second
31	(a)	Shabdara (Delhi)-Saha- ranpur Light.	Shahdara (Delhi)-Saha- ranpur Light.	Assisted company receiving land only from Government.	Baraut to Meerut  Delhi (Shahdara) to Saharaupur.	Th January 1902, 4th January 1902.			30.00		Not commenced. Work commenced.
						Total .			125.00		
36	(a)	Howrah-Amta Light.	Howrah-Amta Light.	Assisted company,	Autpur to Champa- danga.	1902.		···•		9 00	Commencement of work not authorised.
				subsidized by District Board.	Autpur to Rajbul- hat	20th March 1902.				3.90	Commencement of work not authorised.
•						Total .				12·50	
			Total mileage	anotioned and still re 31st Decemb	emaining to be coustroor 1906.	noted on the	1,519:90	1,131.47	550:25	91.20	
		٠									•
			MITERAGE	SANGUIONED FRO	M 1ST JANUARY	TOBISE					
	•		MINEAGE	MARCH	1907.						
12	(a)	Bengal and North-West- ern.	Bengal and North-West- ern.	Assisted Company's line receiving land only from Govern- ment.	Benares to Jhoonsi	18th February 1906.		72-58			•
			Total mile	nge sanctioned from 1	et January to 81st Ms	rob 1907		72:58			
						*					
		[					1				

Capital authorized to be raised for the Madras (Gudranteed) railway, State lines leased to companies, to the 31st

•			A MOUNT AU	rnorized to UP to the 3	PE RAISED B IST I)E(EMBE	Y тие Сом- р 1906.	A MOUNT	T RAISED BY TI OF STATE IN E	HE COMPANIES
Num	mar.	RAIEWAYN.					Share 6	Capit <b>al.</b>	Debentures.
Main head	Sub-head.		Share Capital.	Debentures.	Debenture stook,	Total.	Bate of interest per cout.	Amount.	Cash received,
		Guarantoed.	£.	£	.£	Ł		£	£
6	(a)	Madras	10,257,630	2.221,000		12,481,630	{ 5, 41, 43,	8,757,670 909,960 500,000	2,219,054
		State lines leased to Companies							
	(a) <b>(</b>	Bengal Nagpur	€ 000,000	1,900,000		<b>4,900,</b> 000		3,000,000	1,892,961
1	(£) (£) (£) (£) (£)	Do. Extensions		3,605,000		3,605,000		.,,	3,595,983
5	<b>(</b> f)	Indian Midland	3,000,000	3,419,100		6,429,100	4	3,000,000	3,418,105
11	(a)	Assam-Bongal	1 500,000	1,355,900		2,855,900	3	1,500,000	1,352,525
15	(a)	Burnsa	2 000,000		1,250,000	3,250,000	31	2,000,000	
20	(L)	Lucknow-Barcilly section (Robilkund and Kunmon)		147,000		147,000			160,837
82	(11)	Southern Muhratta	3,500,000	1.365,000		<b>4</b> ,865,000	3 <sup>7</sup>	3,491,540	1,363,863
22	(1)	Mysore section (Southern Mahratta) .			1,200,000	1,200,000			
		Total .	13,000,000	11,802,000	2,450,000	27,252,000		12.991,540	11,784,274
		Branch lines						/	
2	<b>(</b> g)	Ahmedabad-Dholka	\$6,667			86,667			
2	(14)	Ahmodabad-Parantij	133,333			133,833	·		
10	(1)	Hardwar-Debra	200,000			200,000			
3	(()	My men-ingh-Jamalpur-Jagannathgam .	166,667			166,667			
4	(0)	South Behat	100,000 993,830		290,000	GP0,000		379,580	•••
2 9	(f)	Amritar - Patti	106,667		40,000	1,033,333			
y	(6)	Authorit - 1 unit	6,0,461			100,007			
	!	Total .	2,086,667		330,000	2,116 667		879,580	
•	<u> </u>	Grand Total	25,044,297	14,026,000	2,780,000	42,150,297		23,628,750	14,003,328

Details of Debenture loans on 31st December 1906 and the dates at which the loans expire.

100,000 3 per cont. 30th April 1907. 54,200 3 , , 30th June 1907.	£
200,000 34 31st December 1907. 31,400 34 31st December 1907 53,300 34 31st December 1907 174,400 34 30th June 1910 80,000 3 30th June 1910 50,000 3 1st August 1910 50,000 34 30th June 1911. 293,700 34 30th June 1911. 75,000 34 30th June 1911. 243,700 34 30th June 1911.	390,700 3½ per cent 10th January 1907, 444,900 3½ , , 18th February 1907, 155,000 3½ , , 3rd January 1908, 265,600 3½ , , 4th May 1308. 265,600 3½ , , 18th February 1909, 400,000 3½ , , 18th June 1909, 400,000 3½ , , 18th June 1909, 18th June 1909, 18th June 1909, 18th June 1909, 18th June 1909, 18th June 1909, 18th June 1909, 18th August 1910, 3th June 1909, 3th January 1911. 5,505,000

DIX '5.

and railways constructed under the "Branch line" terms, the amount raised and the amount withdrawn

December 1906.

AND ADVA	NCED BY THE DECEMBER 18	SECRE-	Amou To the	NT RAISED IN SIST DECEME	I India Ser 1906.		DRAWN TO	OUNT WITH- OTHE 31st BER 1906.	
Debenture stock.	Capital not	Advances made to companies from money	Share	Debenture	Capital not	Total amount raised to the 31st	During	Up to the	Remares
Cash received.	interest (premium).	raised under Act 51, Vict, Cup. 5.	Capital.	stock.	interest (preminm).	December 1906.	calondar year 1906.	close of calendar your 1906.	
£	£	£	Ŧ	£	£	£	£	£	
	8,524			,		12,485,208	172,323	12,651,532	
								•	
	8,150	2,900,000				7,801,111	93,762	8,060,760	•
	¥,450			.,,		3,605,433	672,972	9,710,952	
	-5,977	1,615,000				8,057,128	68,899	8,793,518	
	15,385					2,867,910		2,867,910	
1,199,819					[	3,199,819	<b>279,7</b> 55	3,947,017	
	735			<b></b>		160,102	13,987	481,459	
	81,007	2,129,900	8,460		34	7,024,804	21,791	6,978,189	
1,200,000	24,000					1,224,000	6,016	•1,237,201	The Mysore Purbar has deposit- ed £23,490 towards the share of Joint Shawards the share
2,399,819	81,280	6,674,900	8,160		34	33,940,307	1,161,682	42,080,031	orn Mahratia Pailria Late
					1				chargeable against the capital of the Mysore Bailway.
			73,280			73,280	2,582	72,248	
•••	•••		130,000		2,667	132,667	419	133,202	
			195,067 161,096	···	-	195,067	242	194,952	
290,000	15,000		161,096			161,096 681,580	1,947	161,0 <b>16</b>	•
			833,333	39,203		872.553	147 52	735,189	
	<b></b>		106,539	•20	"	106,539	79,398	872,190 79,398	
290,000	15,000		1,499,315	20 1110	0.01	0 oor bos	01.00		
2,689,819	104,904	6,674,900	1,507,775	39,203 89,203	2,681	48,651,297	1,418,393	2,243,195 56,979,758	

	<u> </u>				
Indian M	idland Railway-	_	Southern Mahrat	ta Railway—	
£ 610,000 421,200 500,000 257,500 150,000 742,500 165,000 582,000	32 per cent. 34 " " 34 " " 3 " " 3 1 " " 34 " " 34 " " 34 " " 34 " "	30th June 1907. 31st Decombor 1907. 3rd October 1908. 30th June 1910. 30th June 1911. 30th June 1911. 30th June 1911. 30th June 1912.	\$50,000 100,000 255,000 100,000 95,000 150,000 100,000 10,000 505,000 1,365,000	3† per cent. 3† " " 3† " " 3† " " 3† " " 3† " " 3† " " 3† " " 3 " " 3 " " 3 " "	1st October 1907. 1st April 1908. 1st October 1908. 31st May 1909. 1st October 1909. 1st March 1910. 1sth April 1910. 1st October 1910. 1st April 1912.
Lucknow-B	areilly Railway	-	Assam-Bengal Ra	ilway—	
82,000 115,000 147,000	84 per cent. 84 %	1st July 1910. 1st July 1911.	495,990	31 per cont. 31 " " " " " " " " " " " " " " " " " " "	4th July 1907. 4th July 1909. 13th April 1910

APPEN

### Capital expenditure in thousands of rupees

		4	TURE ON OF STORE	S, erc.,	NOT FI	NALLY	CHARG	ED OFF	IN THE AC	COUNTS.	VALUE
Number.	Railways (meluding branches worked).			•		Y	FARS.				
		1897.	1899.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
		~ ,									-
(a) to (y)	Bengal Central Bongal-Nagpur	1,71,83	1,71,20	1,67,01	79,14	40,25	1,42,51	1,17,81	1,02,23	68,63	26,7
(a) & (c) to	Bombay, Baroda and Central	16,82	49,86	60.95	24,05	13,72	9.76	23,43	7.56	1,02	,
(f) & (n) &	India					•				-, -	,
3	Eastern Bengal State	3,00	13,89	29,15	31,10	40,07	35,32	30,58	38,18	37,15	30,0
4	East Indian	80,80	1.07,94	G8,09	39 09	33.15	28,67	48,89	91,17	1,26,85	92,2
8	Great Indian Peninsula	65.88	S0,87	67,71	18,77	2.19	4,12	26,13	69,16	16,17	25,1
6 (a) to (h)	Madras	10,91	7,47	11,38	20,80	51,50	39,56	60,42	37,51	47,77	42,4
7	Nagda-Muttra	ل	•••						1,75	21,89	1,00,3
8	Nizam's Guaranteed State .	15,32	40 79	78,37	37,06	•••				•	
9 (a) to (j)	North Western State	1,26,86	62,24	41 92	41,18	54 63	49,91	30,87	1,21,56	1,92,78	1,45,8
10	Ondh and Robilkhand State.	29,08	23,73	09,27	27,17	2,30	20,61	54 52	30,78	29,13	9,7
11	Assam-Bengal	1.09,69	1.35,92	1,05,81	97,65	88,10	71,81	45,68	13,59	62	4,6
13	Bengal and North-Western .	1.04,74	62,86	70,90	28,89	30,46	26,15	12,63	46,76	45 07	39,2
13	Bengal Pooars	72	1,86	7,98	18,19	15,61	15,56	8,50			
14	bhaynagar-Gondal-Junagad- Pori audar	9,30	5,43						1		
10	Burma	39,67	43 29	ra 5a	50,63	56,42	35,77		3,59	42,25	 Eg e
15 16	Deoghur.				·			"	1		58,5
17	Dibra-Sadiya		•…						•••		
18	Jodbpur-Bikauer	10,04	26 40	4,86	6,61	4,00	6,77		89	1	
19	Morvi	1.,02		, , ,	2,32	11	3	85	+6,24	7,18	
2 (b) & (g) to	Rajputana-Malwa	12,09	8,58	2,67	63	21	1,07	1,63	35,80	26,36	
(m). 20	Rohilkund and Kumuon .		•••			3	43	83	9,74	33,18	9,8
21	South Indian	5.19	-21,05	2,70	14,00	26,50	73,39	56,12	27,81	7,14	
22	Southern Mahratta		•••					2,56	12,60	2,78	9,8
23	Udapur-Chitor	26	1,13	2,16	45	21					•••
24	Bara-et-Basirhat Light .		***						5,69	1,38	***
25	Barsi Light		•••						23	7,92	
26	Bukhtiarpore-Behar Light .		•••					5,30			•••
27	Cutch							92	1,35		2,
28	Dholpur-Bari									2,04	1
20	Dwarn-Therria Light		•••					8,24	1,39	82	
80	Kalka-Simla			3,39	4,51	23,53	49,99	50,99	21,40	4,34	•••
31	Shahdara (Dolhi)-Saharanpur Laght				<b></b>						8,
	Banaghat-Krishnagar Light .	1,01	5,01	5			<b>.</b>				,
	*	- <b>,</b>	-,						-		***
								16			
82	Tarakeshwar-Magra Light Tozpore-Balipara Light	、								***	•••
83	Darjoeling-Himalayan				ŀ						•••
85 86	Howrsh-Amta Light	 4,01	29	1	1	8	1	20	2,79		***
56 97	Howrah-Sheakhala Light .	2,81	33	1	'	l °					•••
37 <b>3</b> 8	Jorhat										•••
		0.00.50	0.00.00	0 60 04	K 40 P7	5 00 20	8 11 40	K01.00	# OO PM	P 00 10	
	TOTAL .	8,30,33	8,27,93	8,26,84	5,42,51	5,03,52	6,11,46	5,91,89	6,89,57	7,22,43	6,01,

IX 7.
uring each of the past 10 years.

*.				YEAR			-			Remares.
1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	<b>190</b> 6.	
11,59	4,37	1,95	27	3	4	15			•	• Purchased
32	1,13	33,92	27,35	4,29	57,16	34,13	40,64	57,18	21,80	the State fro
24	6,00	13,81	13,34	4,24	2,51	7,97	3,26	1,48	4,54	1905 and inc porated w the 5' gauge recti
16,63	10,52	18,21	4,57	13,01	, 19,12	85,25	15,25	25,14	19,91	of the Easte Bengal St Railway [86
27,27	36,32	1,06,52	64,34	73,57	54,29	17,91	28,98	90,13	54,33	Railway [86
7,85	1,63	8,27	13,36	21,27	12,27	81,84	37,80	12,63	45,26	
6,57	1,47	3,66	3,26	10,11	25,43	16 44	6,21	7,49	4,29	
								`	7,50	
40	3,06	12,80	12,67	1,51	5,86	3,65	72	51	3,15	
\$6,32	21,85	5,70	* 79	12,30	22,21	14,84	13,91	88,50	1,14,41	
3,51	7,06	5,68	79	5,85	17,93	23,91	7,58	6,92	4,74	
4,25	2,65	1,63	87	3,05	7,69	9,86	6,32	4,79	10,41	
80,0	24,03	15,81	<b>1</b> 8,58	18,47	12,49	18,33	3,49	14,00	32,80	
52	1	4,09	2,32	1,40	7	25	5		***	
67	1,24	8	16	80	35	55	-1,05		23	
1,50	c,36	11,96	4,74	20,85	26,60	19,57	12,20	6,64	18,95	
	20		2,52			 9	 4,47		23	İ
14	6,08	14,11	2,03	2,22	1,95	4,22	1,36	71	78	
2	12	4	. 6	10	-12	29		3,00	1,13	+Roprosents
-12	-1,59	3,07	1,83	89	8,70	8,19	3,35	10,09	8,04	penditure conversion
2	2,42	1,02	3,39	2,06	6,86	6,11	1,33	77	11,65	the existing from 2' 6" 8' 37" gang
1,22	43	73	26	- 3	1,46	2,96	1,27	11,75		8' 37" gang
1,40	5,34	3,42	1,44	1,88	26	. 85	85	18,58	1,51	1
2,25	5		•••	42						l
							2,05		26	1
1,77	27		•••	39				70	4,94	l
1					,	2,17	23		15	ļ
			•••		•	12	12	10	10	İ
			•••		<b></b> .				88	i
			<b></b> .					50		
			•••		1,07	3,93	2,85	4,96	1,94	
			•••						***	j
	1,20		24	•		•••	ı		•••	1 Purchased
										the State f the 1st J 1904 and in perated
	1	18	•••		•••	1	1	8	19	the Ess Bengal S
	6	12	•••			•••			•••	Railway.
2	-25	54	-16	1	9	41	70	12	13	1
1,26	99	11	46		72		80		1,62	l
1,17	48	﴿				3	•		•••	1
38	20		***	-31	4	12	2		6	
		<del></del> -						<del></del>		ł

APPEN

Capital expenditure in thousands of rupees

Number.	Railways (including branches								OFF IN T	HE ACCOUN	EXCLU
	worked).				•	Y	BARS.				,
,		1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
	Bongal Central	86	2,15	75	1,66	1,18	1,15	73	43		
(a) to (y).	Bengal-Nagpur	8,56	57	25	1,68	<b>3</b> ,37	1,61	3,58	5,66	5,20	46,
(a) & (c) to	Bombay, Baroda and Contral						•				
& (n) & (o).	Indu	28,88	15,33	36,60	8,42	21,74	9,89	5,71	4,83	2,74	12,
3	Eastern Bongal State	27,03	7,64	8,72	13,85	11,37	15,46	23,86	49,13	1,08,73	30,
•	East Indian	19,82	28,96	40,78	48,92	64,24	58,69	41,88	46,44	63,82	51,
5	Great Indian Poninsula .	4,37	8,04	6,75	10,28	11,65	17,04	23,56	64,79	73,48	<b>5</b> 3,
(a) to (h)	Madras	3,30	€ 3,16	2,43	3,93	9,33	4,56	5,91	14,26	13,47	15
7	Nagda-Muttra										
8	Nizam's Guaranteed State .	3,15	1,24	1,05	2,78	6,53	 8,14	3,76			•••
9 (a) to (j)	North Western State	28,30	18,92	20,58	19,10	14,67	48,44	22,42	2,97 30,94	2,76	2
10	Oudh and Rohilkhand State.	4,01	4 38	9,74	8,30	9,45	12,75	12,40	- 1	33,14	42
11	Assam-Bongal					5,40	12,4.5		19,80	19,62	11
12	Bongal and North-Westorn .	2,86	5.05	6,63	12,21	 7,19	25,66	21,79	29,04	12,03	9
13	Bengal Dooars	1,08	53	38	16	2	5	21	5,55	16,81	25
14	Bhavnagar-Goudal-Junagad- Perbandar	73	2,10	91	31	16	40	3	3,33	3,54	2
15	Burma	6,24	5,00	11,31	25,14	22,05	7,91	20,35	21,11	24	
16	Deoghur		1	-1			·		1	17,60	22
17	Dibru-Sadiya	2,41	7			7,20	23	32	22	23	-
18	Jodhpur-Bikaner	7	6,35	-81	-1,58	3,16	3,77	62	56	27	
19	Morvi	49	7	5	- 16	1			-1	12	
) &s (g) to	Rajputana-Malwa	2,85	3,33	3,98	8,53	8,20	13,88	9,48	8,62	-13	
). 20	Robilland and Kumaon	1,71	79	21	1,15	1,02	66	1,59	1,56	13,90	16,
21	South Indian	76	1,52	3,59	3,03	3,83	1,46	3,40	6,64	65	12,
22	Southern Mahratta	5,60	6,29	7,50	5,79	4,59	3,20	2,98	2,26	8,41	25,
23	Udaipur-Chitor	'				19	4	1	- 1	5,49	3,
24	Baraset-Basirhat Light .					"	1	- 1		1	
23	Barsi Light	1				<u></u>	7				
26	Bukhtiarpore-Behar Light .						`		39	1	6,
27	Cutch			1					i		
28	Dholpur Bari										•••
29	Dwara-Therria Light								i i		•••
30	Kalka-Simla			]						""	•••
31	Shahdara (Dolhi)-Saharanpur		1				.				
l	Light										•••
	Ranaghat-Krishnagar Light										•••
82	Tarakeshwar-Magra Light .		1	1		2	5	6	8	5	
88	Tezporo-Bulipara Light .	3	1	5	13						•••
35	Darjeeling-Himalayan	38	49	25	10	21	12	31	4	16	:
36	Howash Should I Tield								14	16	;
87	Howrah-Sheakhala Light					·		2	·	-1	•••
88	Jorhat			4		17	8		- I		_
ı	TOTAL	1,48,40	1,22,09	1,59,64	1,68,79						

DIX 7—concluded.

during each of the past 10 years.

•				У	EARS.					Bamares.
897.	1893.	1809.	1900.	1901.	1902.	1903.	1901.	1905.	1906.	
10,29	6,90	3,04	34	2,59	1,58	76	-36			
1,99,28	1,62,45	1,98,57	75,84	●77,61	1,76,45	1,91,68	1,19,88	1,19,67	1,16,49	
18,06	89,09	98,92	28,58	56,65	29,50	19,61	9,62	7,90	2,69	
51,23	85,51	56,40	49,25	66,77	81,52	1,19,34	1,00,61	• 2,(8,13	94,27	
1,42,53	1,66,97	2,18,13	1,62,19	1,41,12	1,45,82	1,39,68	1,45,03	2,83,23	2,21,78	
71,81	79,51	78,98	53, 2	44,51	23,58	1,16,21	1,76,71	1,02 30	1,12,28	
19,63	12,65	19,27	55,11	63,58	60,36	86,03	72,11	69,17	54,97	
						<b></b>	1,73	46,84	1,46,42	
18,30	60,32	96,90	92,24	18,40	15,84	5.73	5.26	6,53	1,83	
1,06.39	82,17	66,46	83,17	93.87	1,"0,10	69,53	2,09,09	2,72 27	3,22,00	
44,90	33,16	55,63	39,26	.32,76	76,17	87,15	53,06	41,37	34,11	
1,10,23	1,18,71	1,13,15	86,16	85,47	60,56	63,24	19,81	18,21	25,28	
1,63,10	79,46	70,13	5~,94	45,78	63,17	53,92	79,58	90,01	88,11	
2,17	4,25	22,26	19,77	15 2	10,15	7,09	5,35	3,56	2,13	
8,67	8,95	92	17	96	44	67	-1,40	- 54	1,68	
59,87	51,62	86,24	92,79	95,26	71,01	81,08	36,97	81,20	90,42	
	1	1			-9			23	-23	
2,55	27	17	2,57	8,32	1,7.3	41	1,60	46	93	
10,12	£9,33	18,01	4 89	19,78	6,61	-57	2,21	1,60	2,11	
91	3	27	2,22	31	-26	56	6,18	9,85	99	
-2,83	9,13	10 59	17,19	12,71	23, 3	80,53	43,71	39,38	39,58	•
3,79	2,10	13	5,37	4,31	12,92	4,60	19,79	10,61	25,28	
4,59	-19,88	7,39	17,47	47.19	99,17	<b>52.83</b>	31,08	23,65	20,32	
8,19	11,05	P,74	8,15	4,83 82	1.22	21,96	34,22	33,19	11,04	
2,51	1,18	2,16	45	1	4	1	***	1	9	
1,77	27			39		***	7,73 26	1,"3	11 20	
-,,,,						 7,18	62	14,69	11,32	
						1,01	1,48	10	2,93	
								4 2,04	1,56	
						8,24	1,89	16		
		5,81	6,10	22,96	57,95	* 48,51	26,93	7,87	-13,06	
					•••				14,10	•
1,01	6,21	5	21						1	
	2	24	-1	10	20	38		2	26	
8	7	17	18					~	~	
41	24	79	-0	22	20	73	74	14	-9	
5,27	1,28	16	47	8	72	20	3,23	16	1,82	
8,98	81	•	P++			5		-1		
87	7	22	-28	8	-5	8	•••	4	1	

APPEN
Capital outlay on the different classes of

					Mileage.	
		•		Open.	Under con- struction.	Total.
PART I.				-		-
CAPITAL EXPENDITURE ON RAILWAYS, THE TRANSACTIO THE GOVERNMENT ACCOUNT		TASS TH	ворди	Miles.	Miles.	Miles.
(i).—State lines worked by Companies			•••	15,789.03	1,280.87	17,070 80
(ii)State lines worked by the State		•••		6,105:07	205:40	6,100:47
(iii) Companies' lines goaranteed under the old contract	ts	•••		10101	1.00	905.01
(iv).—Companies' lines guaranteed under modern contract	la	•••		32.01		32 04
(v).—District Boards' lines	•••	•••		103:36		103 36
(vi)Branch Lino Companies, receiving relates from tr	affic interchar	ged wit	h main	403 15		403.15
lines.  Total open lines and li	NES PARTLY	OPEN		23,937-56	1,577:27	24,914.83
(vii) Lines wholly under construction by State agency	·				601 37	601:37
viii)Lines wholly under construction by Companies	•••				269 40	248:40
Тот	al (vii) and	(viii)			869:77	869-77
(ix) Unclassified expenditure including collicries, &c.	•••			'		,,,
. PART II.	POTAL PA	авт I		23,337:56	2.117 04	25,784 60
CAPITAL EXPENDITURE ON BAILWAYS, THE TRANSACTION THEORY OF THE GOVERNMENT ACC		n bo No	T PASS			
(i).—Branch Line Companies, receiving relates from tra-		nged wit	h maio	580 38		530:38
(ii).—Assisted Companies' lines—					Property Property Services	,
(a) Subsidized by the Government of India				162:36		1.69.9.4
(b) Subsidized by Local Governments	•••			136 26	8.53	162·36 144·78
(c) Subsidized by District Boards	***			158 00	302	158.00
(d) Receiving land only from Government	•••	•••		1,193:76	82 67	1,276:43
	Тота	L (1i)		1,650:38	91 19	1,741:57
(iii).—Unassisted Companies' lines	•••	•••		41.77		41:77
(iv)Native State lines-			-			
(a) Worked by Native States	•••			1,338:30	27.38	1,365-68
(b) Worked by Companies	•••			1,840 12	152.88	1.993 00
(c) Worked by State railway agency	•.•			235 28		235.28
	Тота	L $(iv)$		3,415:70	180:26	3,593.96
(e).—Foreign State lines		•••		73:60		73.60
Total open lines and L	INES PARTLY	OPEN		5,759:83	271:45	6,031.28
(vi)Lines wholly under construction by private Comp	panies				126.88	126.88
(rii) Lines wholly under construction by Native States	s	•••			19.25	19.25
т	otal (vi) and	(víi)			146-13	146-13
riii) State outlay on the Patri branch (Bombay, Barod	a and Central	India ra	ilway)			•••
	TOTAL PA	BT II		5,759:83	417.58	6,177.41
ABSTRACT.	GRAND TO	TAL		29,097:39	2,864.62	31,962.01
Outlay on open lines and lines partly open—(i to vi, Part	I and ita's	Part III	-	29,097:39	1.040/70	90.040.1-
Outlay on lines wholly under construction—(vii and viii,			Part II)		1,848.72	30,946.11
				•••	1,015-90	1,015-90
Unclassified expenditure (ix, Part I)	•••	•••		*	••• ,	•••

DIX 8.
railways at the close of the year 1906.

Capital (In	outlay at close of thousands of rupees	f 1906. .)	Remarks.
Open lines.	Lines under construction.	Total.	DEWARKS.
2,23,64,80	5,60,14	2,29,24,94	The outlay included in Part I under "State lines worked by Companies" of account of the railways purchased by the State from the East Indian, the Sout Indian, and the Great Indian Peninsula Railway Companies, and under "State lines worked by the State" on account of the railways purchased from the Eastern Bongal, the State unjub and Debbiand the Oudh and Robilkhand Guar anteed Railway Companies, represents the actual Capital expenditure incurred by the
93,07,49	2,29,59	95,37,08	Companies up to the date of purchase and subsequently by the State.
14,03,40		14,03,40	
29,24		29,24	
47,98		47,98	
3,17,46		3,17,46	
3,34,70.37	7,89,73	3,12,60,10	
•••	3,29,89	3,29,89	
***	1,34,33	1,34,33	
···	4,61,22	4,44,22	
0.14.70.07	13 50 05	96,63	
3,34,70,37	12,53,95	3,48,20,95	
3.10,64		3,10,64	
1,57,26		<b>1,</b> 57,26	
1,25,00	62	1,25,62	
74,01		74,61	
8,40,29	23,76	8,73,05	
12,05,56	24,38	12,29.94	
27,66		27,56	
4,72,26	2,77	4,75,03	
12,92,34	31,84	13,24,18	
1,34,41	***	1,34,41	
18,99,01	31,61	19,33,62	
1,50,79		1,50,79	
35,93,56	58,99	36,52,55	
•••	28,64	28,64	
	3,60	3,60	
***	32,24	82,24	
		8,08	•
35,99,56	91,23	36,92,87	
3,70,63,93	13,45,18	3,85,13,82	
3,70,63,93	8,48,72	*3,79,20,73	* Includes Rs. 8,08,000, item (viii) of Part II.
•••	4,96,46	4,96,46	
•••		9 <b>6</b> ,0 <b>3</b>	1

APPEN

### Capital liability on account of Railways classed

	SHARE	CAPITAL	OF PURCIL	1) Ased Rail Innuities.	Ways beil	NG PAID	(2)	(3)	(4)	(5)	(6)
RAILWAYS.	Commuted value of stock purchased.	Commuted Capital re- presenting Annuthies which were purchas- ad by creation of dobt (hability united in column 3).	New Stock	Net capital to b paid off by	Deduct amount rodecmed by Annuity payments.	standing.	State outlay.	Debt in- correct for purchase of Kail- ways.	Capital advanced by Gov- ernment to Com- panies.	Capital raised by Commanie- on Scere- tary of State's usrantee (inclusing over drafts),	Total Capital liability
India, GENERAL	£	£	æ	£	£	æ	£	£.	Ŧ	£	£
	32,750,000	7,299,157		25,450,843	2,519,369	22,931,474	8 : 64 634	7,635,075	•••	8,000,000	47.131,183
2. Rajputana-Walwa (incldg Golbri-Rutlim Nagda).							10,768,146		•		10,768,446
3. Rewari-Phulera							335,978				835,378
4. Palanpur-Deosa	·· <b>·</b>			<i></i>			15,944		•••		15,941
5. Bhopal		•	₡.	.,			217,180		•••	•••	217,189
6. State railway stores				•••			10,633				10,683
<ol> <li>Expenditure in England for stores purchised and remain- ing unappropriated.</li> </ol>			,.,	•••			111.332			•••	111,332
CENTRAL PROVINCES.		1			ĺ						
8. Warora Colliery						l	85,624		•••		85,621
9. Umaria ,, (depreciation						l	12,178				12,178
on works). 10. Bilaspur-Etawah							5,009				5,000
11. Nagpur-Chhattisgarh (dogreciation account).							43 893				40,809
BURMA.											
12. Burma Railway Extensions				•••	•		829,335	•••	•••		829,330
Ausam.											a
BENGAL						,	60,613	•••		·	60,612
14. Eastern Beng:l system? .	3,091,917	543,817		2,548,100	249,811	2,598,289	9,819,374	1,374,901	•••		13,822,564
15. Murshidobyd Branch			•				FG6,987		•••	•••	566,987
16. Dhubri Ganbeti				•••			521,360				521,360
17. Tirhoot							3,757,929				3,757,929
18. Tirhoot new Extensions .					<b>,</b>		731,127				731,427
19. Ranaghat-Bhagwangola .							20,163				20,163
0. Katibar-Godagari United Provinces.	•			,		•••	378 319				<b>3</b> 78,31 <b>9</b>
1. Oudh and Robilkhand							4,000,851	10,728,742			14,828,593
2. Agra-Delhi Chord							852,687			🦡	852,687
3. Allahabad-Janupur		•					205,138			*	205,138
4. Forbesgauj-Nepaul Punjab.	•••			•••		•••	3,267			***	8,267
5. North Western	14,009,124	4,911,216		9,097,908	742,786	8,355,122	<b>81,</b> 0 <b>76,5</b> 35	4,188,601			43,570,258
6. Shadara-Sangla							158,720				158,720
7. Joch Doal (southern sec.) .				,a	•••		462,364				462,364
8. Quetta-Nushki							580,239				580,23 <b>9</b>
9. Frontier Bailway Reserve .				•••		•••	293,212				293,218
Petroleum Operations, Balu- olistan.							7,946				7,946
1. Juliandar-Hosbierpur							969	}			969
2. Ludhiana-Ferozepore						-4-	1,887				1,887
3. Kalka-Simla					***		1,087,096		'		1,087,096
4. Loi Shilman				•••		***	117,829	.,,			117,829
Carried over .	50,151,041	12,754,190		37,396,851	3,511,966	33,684,885	75,836,415	29,877,819		8,000,000	141,598,619

as State railways at end of 1906.

		Suare	CAPITAL (	1) A Puberty A Zu ago	SED RAIL	WAYS BEIL	OIAT O	(2) 🐅	(3)	(4)	(5)	(6)
	Rauways.	Commuted value of stock purobased.	Ded Commuted expetal representing annuities which were purchased by creation of debt included in column 3).	New stock of Great Indian Penusula Railway (Company issued in exchange for portion of abunity.	Net expital to be pand off by annuities.	Doduct amount redeemed by atomity payments.	Net out- standing.		Delting curred for purchage of Rare wajs.	Capital advageed by Got- rument	Capital raised by Companies on Serretury of State's scuarantee (inclining over-drafts).	Total cepi- tal lightity.
	Bron ht forward	3. 50,151,011	£ 12,754,150	æ	.£ 37,296,851	£ 3 51 1 966	£	£ 75 830 415	20.877,319	£	£ (100 100)	£ 141,508,619
<b>3</b> 5.	MADRAS. South Indian (including							2,112,536	4,726,169		1,415,000	8,286,695
20	Pamban Branch). * Tinnevelly-Quilon (British							2,787	•		Br F a a	289,996
	Feet.on). Timevelly-Quilon (Nativa		·				·	11,-15			287,2.9	786,600
	State section: Azhikal-Mangaloro			•••		•••	 •	801.311		•	771,731	8-1,511
	North-Post line, Madras rail-							4,081.072		***		4,381,072
٠.,	way (E)-t Coast Balway, south to section).											-,,
40.	Nilgio							249,520				219,520
41.	Bezwa ha extendion							78,785				78,735
42,	Bezwodi-Ma alapidam .									67.278		67,278
<b>4</b> 3.	Guntakal-Mysore frontier .	:			•••		•••	594,998				304,095
41.	Tanj re District Board		•••		•••			198,191		77,733	41,017	317,27
45.	Vizaçap dam Raipur							16,496				16,33
4G.	Hospet-Korbur							98 997				90,90
47.	Beilary-Rayadruz							51,898				51,899
48.	Timpatur-Krishnagiri .	***						71,917				71,917
49.	Morappur-Dharmapuri .							55,789	•••		•	£5,789
<b>5</b> 0.	Cooncor-Colamanaud			,		•••		\$1,000				×4,03
51.	Rame-waram Extension							28,370				38,37
52.	ROMBAY. Great Indian Peninsula	]   31,859,218		1,750,000	33,100.218	2,502,216	   30,507,002	1,159,555	5 9 <b>6 1,</b> 006	 	2,575,000	42,700,250
53.	Bombay, Baroda and Central				.,			1,057,010	12,499,144		2,000,000	15,556,15
51.	India. Jodhpar-Hyderabad (British						]	271,076	, •••		l .	271,37
55.	Kurnool-Road-Karnool .						l	1,357			١	1.35
56.	South rn Mahentta (depreci-				•			95,108	· · · ·			35,13
57.	ation on works). Sabarmati-Dholka							0,9.3	i . ••·			8,99
<b>5</b> 8.	Baran-Kotah							122,037				122,03
59.	Nagda-Muttra							1,174,563				1,174,56
		85,010,259	12,754,190	1,750 000	70,506,069	5,814,182	61,691,887	F8,301,970	47,087,258	2,945,011	15,128,047	217.535.22
40	LEASED LINES.								!	i		
	Assam-Bengal						""	5,339, 108			2,855,900	1
	Bengai-Nagpur				,			2,961,962	i	9,068,961	1	1
	Burma	•••	'					5,127,488		010010	3.937,225	1
	Indian Midland									2,143,148	1	i e
	Lucknow-Bareilly						•••	341,409	· · · · ·	321,857	1	-
	Mysore							110:00			1,200,000	
<b>೮</b> ೮.	Southern Mahratta			<del></del>				1,105,225		2,129 900		,
_	BRANCH LINE.	<u> </u>			<b> </b>		<u></u>	13.975,515		13,666,066		
67,	Hardwar-Dehra	95.010.250	10.754.100	1.750					47 107 11 10		194,959	
	. TOTAL .	85,010,250	12,754,190	1,750,000	70,506.060	5,814,182	61,091.587	102,250,494	47,007,298	16.911,377	(† <b>4</b> 3,069,710	273,120,80

NOTE. - The premia paid in purchase of companies' lines are as under :-£ H-4, 0,550,600 @ Rs. 15 w £ 1 == 9,52,50,600 1,134,437 , = 1,70.46.555 2,933,804 , = 4,10,07,060 9.99, 277 == 1,48,39,155 1,036,049 , = 1,48,39,155 14,879,218 , = 22,328,87,270 4,135,280 , = 6,20,29,200 East Indian railway
Eastern Bongal railway
Sindh-Punjab and Delhi railway
South Indian railway
Oudh and Rohilkhaud railway
Great Indian Peninsula railway
Bombay, Baroda and Contral India railway ... ...

APPEN

### Main results of working Indian railways

	1	In	THOUSAND	OS OF RUPE	TA .			Percent-	P	ASSENCERS.			Goons.	
YEAR.	Milengo open.	Capital outlay,	Gross carnings.	Working oxpenses.	Net	Gross carnings per mila per week,	Percent- nge of working expenses to gross earnings.	nge of net earnings on Capital outlay on lnes wholly and partly open.	Number carried in thou-sands.	Earnings	Average rute	earried in thousands	Earnings in	Average rate charged per ton per mile in pies.
1853 .	<b>2</b> 0	97.07	00			Rs. 87	AF TC	1,00						
1854 .	71	37,96	90	41	49	63	45 56 61 47	0.57					•••	•••
1855	169	4,00,00	2,31	1,42	89	93	55.97	0 65		•	"	,		•••
1856 .	272	5,50,00 8,00,00	8,13 16,10	4,55 6,71	9,36	111	41.57	1.17						•••
1857 .	287	12,00,00	25,43	10,51	14,89	170	41:45	1.21						
	200	12,00,00	20,40	( 10,00	15,50	"	11.10	``*		•••				•••
1858 .	427	16,00,00	• 33,82	15,63	18,19	152	46.22	1.14						
1859 .	625	22,50,00	57,24	\$7,74	25,50	176	48 16	1:31						
1860 .	833	26,66,00	66,67	37,05	29,59	153	55101	1.11						
1861 .	1,587	24,00,00	93,63	18,60	40,54	120	t3 90	1.19						
1563 .	<b>2,33</b> 3	48,90,00	1,31,15	50,32	51,13	111	59:74	1.13				<u> </u>		
1863 .	2,507	53,00,00	2,20,47	1,33,04	87,13	169	60 ni	1.02						
1864 .	<b>2,9</b> 58	59,00,00	2,55,69	1,70,95	1,15,01	156	59.76	1.58						
1865 .	3,363	<b>6</b> 3,00,00	4,25,81	2,24,27	2,01,57	241	52-13	3.20						
1866 .	8,563	70,00,00	4,91,91	2,59,34	2,32,53	266	52.73	3:02						
1867 .	3,929	80,00,00	5,14,51	2,93,76	2,50,78	2.16	<b>50</b> :95	3.13						
1868 .	4,008	84,00,00	5,67,00	3,07,16	2,59,63	272	54-22	3:09						
1869 .	4,255	89,60,00	6,13,10	3,41,74	2,71,36	277	55.71	3.05			]		···	
1870 .	4,771	00,00,00	6,56,67	0,60,15	3,03,52	269	54:47	3.37						"
1871 .	5,074	90,00,70	6,59,20	3,67,97	2,91,23	250	55 82	3.21						
1872 .	5,369	90,00,90	6,82,96	8,73,45	3,09,51	245	54:68	3.44						
	1													•
1673 .	5,697	91,72,60	7,22,90	3,77,85	3,45,05	244	53.28	3.75						
1874 .	6,226	95,87,15	8,33,77	4,06,89	4,29,88	258	48:14	4:48	•					
1875 .	6,541			, 3,97,48	3,93,89	233	5023	3.90						
1876 .	l	1,01,77,85	9,38,83	4,46,45	4,87,38	262	47.81	4.65	"	-				
1877 .	7,320	1,09,01,24	12,11,28	5,38,68	6,72,60	\$18	41:17	6.17	-			-		
1878 .	8,201	1,18,29,55	11,25,30	5,62,38	5,62,92	269	49-97	4.76						
1879 .	8,475	1,22,83,97	12,08,15	6,26,28	5,81,87	275	51.84	4.76						
1880 .	8,996	1,28,56,91	12,86,55	6,48,00	6,38,55	282	50.87	4:97						<b>,</b>
1881 .	9,858	1,40,80,50	14,32,31	7,07,12	7,25,19	285	49:37	5·16	54,764	3,79,23	2-78	13,214	9,55,97	7:95
1883 .	10,069	1,43,24,42	15,35,23	7,66,81	7,68,42	294	49-95	5:36	58,876	4,08,37	2.71	14,833	10,15,97	7:91

DIX 10.

as one system from the commencement.

		In	THOUSANI	e of kups	es.			Percent-	PA	Lesknoere.			Goods.	
YEAR.	Mileage open.	Capital outlay.	Gross carnings.	Working expenses.	Net carnings,	Gross earn- ings per mile per week.	Percentage of working expenses to gross carnings.	ngo or net earnings on capital outlay on lines wholly and partly open.	Number carried in thousands.	Earnings in thousands of rupees.	Average rate charged per milo in pies.	thousands of	Earnings in thousands of rupees.	Average rato charged per ton per mile in pies.
						Ra.			,					
1883 .	10,447	1,48,30,56	16,28,94	7,97,05	8,11,80	301	48.62	5:68	65,099	4,00,08	2.60	16,999	11,28,89	7:30
1884 .	11,527	1,55,15,01	16,06,62	8,15,62	7,91,90	276	50.76	5:09	73,815	4,46,84	2.56	16,663	10,56,59	7-31
1885 .	12,208	1,61,91,78	17,98,96	8,86,33	9,12,63	284	49-27	5 C1	€0,865	4,78,12	2.52	18,925	11,91,54	6.8
1886 .	12,865	1,70,49,89	18,70,46	8,93,10	9,77,36	285	47.75	5.73	88,436	5,00,77	2.51	19,576	12,38,59	7:0
1887 .	14,068	1,82,87,93	18,46,81	9,10,33	9,36,48	260	49/31	5:12	95,413	5,35,32	2.21	20,196	11,92,93	7:17
										,				
1889 .	14,525	1,93,04,33	19,76,45	9,87,11	9,89,01	203	49 96	<b>5</b> ·12	193,156	5,69,06	2 71	22,:93	12,79,04	6.8
1889 .	15,900	2,05,04,61	20,19,37	10,37,7 (	16,11,63	257	50.64	4-93	110,650	6,12,74	2.50	22,249	13,05,56	6.88
1690 .	16,401	2,10,67,04	20,67,01	10,00,80	10,36,12	213	49.87	4:85	111,082	6,25,81	2.21	22,613	12,09,52	7:11
1891 .	17,283	2,21,06,42	24,04,03	11,30,39	12,73,64	271	47.02	5:76	122,855	6,86,13	2:52	26,159	15,60,81	6.7
1892 .	17,769	2,27,30,00	23,22,03	10,90,35	12,82,58	253	46.91	542	127,388	6,91,15	2.52	26,625	14,77,52	6.7
1893 .	18,450	2,33,17,87	24,08,42	11,04,77	12,73,65	254	47:12	546	135,520	7,29,57	2.50	28,817	15,21,63	6.6
1894 .	18,840	2,37,79,61	25,50,89	11,98,40	13,52,49	262	46 98	5:69	145,727	7,57,58	2.56	32,614	16,24,82	0.4
1895 .	19,467	2,11,08,05	26,23,00	12,11,49	14,11,70	261	16:15	5:73	153,081	8,02,21	2.49	23,628	16,36,94	6.3
1896 .	20,209	2,68,95,23	25,36,14	12,17,81	13,22,30	215	47:86	4:92	159,500	8,22,07	2.45	32,471	15,41,51	6.4
1897 .	21,115	2,82,12,01	25,60,11	12,47,73	17,12,38	230	1874	4.62	150,581	7,62,13	2:47	33,926	15,88,89	8:0
	00.004	3 03 00 00	07.44.04	10.00.40	14 40 00		45.07		271320	- t- 200	0.10	nr. 343	45.04	
1808 .	23,507	2,92,03,20	27,41,31	12,98,68	14,42,63	244	47:37	4:94	151,566	7,53,68	2.50	35,642	17,84,97	60
1899 .	23,507 Revised. 24,752	8,08,50,12 3,29,53,34	29,36,78	13,93,36 15,09,31	15,43,42 16,45,01	246 215	47·45 47·85	5·00 4·99	161,729	8,09,39	2:51	39,748	19,19,82	5.96
1900 . 1901 -	25,363	3,30,16,89	31,54,32	15,72,45	17,87,93	255	46:79	5'27	176,308 194,749	10,07,17	2.48	42,896 43,392	20,36,52	5.8
1901 .	25,931	3,3.7,10,00	33,92,69	16,70,49	17,22,20	252	4075	4:03	196,648	10,07,17	2.21	45,577	21,23,57	5:73
.,,,,	,	.,, . ,			.,,			"	200,023	25,01,10		20,0 1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	500
	<b>26,95</b> 6	3,41,11,23	36,00,82	17,11,09	18,89,73	257	47.52	5:54	210,231	10,98,14	2.21	47,684	22,41,92	5:6
1904 .	27,565	3,52,85,95	39,64,97	18,77,50	20,87,47	277	47:36	5.91	227,097	11,76,20	2•51	£2,051	25,18,61	5.38
1905 .	28,295	3 <b>,66,9</b> 3,9 <b>4</b>	41,68,09	19,94,00	21,74,09	283	47:84	5'92	248,157	12,73,83	2.47	51,936	26,20,71	5.1
1906 .	29,097	3,79,20,78	44,11,73	22,00,71	22,10,99	292	49 88	5.83	271,063	13,68,31	2.46	58,869	27,59,69	5.45
			l				1							

APPEN
Summary of the general

Indian Railways trea

														GE	VERAL RESUL
											1			TOTAL WORKIN	O EXPENSES.
			Calo	ndar	şear.				•			Total Capital outlay in thousands of rupers	Grosse arranges in them and of rupees.	Amount in thousands of rupees.	Proportion per cont to gross carnings.
	 		 	1	٠	-	٠	-	-		-	2	3	1	5
ეივ		·										0 49.77,3 k	.33,92.69	16,70,49	49 24
003											- ;	3 41,11 23	36,00,82	17.11.09	47:52
04												8,528a (ca	80 61,97	18,77,50	<b>47</b> :36
05							• .			.,		3,68,98,94	11,6:,00	19,91 00	47 81
90G										·	. !	3 79 20,73	11 11,73	22,00 74	19.88

						•					GRO	OSS EARNE	HT ZI SDV	OUSANDS
							CoA	CHISO TRAI	Fic.					Соотя
, (	'alon	dar y	ear.		lat class.	2nd class.	Int rose- derte class	   brd class,	Senson and vindors' tackets.	Other Ceaching Traine.	Total Conclude Tradic (sum of 15 to 20).	Total Geod Traine (sum of 20 to 27).	General merchan- dre,	Coal and coke for the pulled and for ign railways
	14				15	16	17	18	19	:0	21	22	53	24
1902					08,57	56,59	<b>67,</b> °0	8,54,97	9,75	1,17,60	11,75,68	21,23,11	17,10,72	2,26,75
1903					41,50	58,13	71,68	9,16,51	10 13	1,56,26	12,54,40	22,41,92	18,53,45	2,29,93
1901	•				40,76	19,73	71,51	9,80,60	11,19	1,61,36	13,37,56	25,13.81	26,85,56	2,56,13
1905			٠		45,12	6116	83,96	10 6 - 73	12,23	1,61 69	11.34,72	26.10,74	21,32,22	2,89,19
1906	•	•			47,23	67,85	E0 87	11,53,48	13,38	1,68,34	15 06,65	27.59 69	22,36 58	3,21,81
				,										

Number of passangers and quantity of goods carried, the average miles

. •	SRD CLASS		letes.	MEDIATE (	lnien		to C1.188	21	s.	er Ctass	1:						_	
Average rate charges per mile in pies.	Average miles carried,	No.	Average rate charged per nule in pies.	Average miles carned.	No.	Average rate charged per unle in pice.	Average miles carried.	No.	Average rate charged por mile in pics,	Average nules	No.			ar.	er ye	ilend	Ci	
48	47	46	<b>4</b> 5	44	43	42	<b>31</b>	40	39	38	37				36			
.2.3	41 03	171,716	3.11	61 30	6,813	5:21	82:39	2,530	12.86	102:28	563							1902
2.3	40.94	184,292	3.00	61.61	7,214	5.24	78-13	2,580	12:31	101.21	594	>						903
2.3	40.71	199,651	3 00	62.89	7,394	5.69	74.23	2,715	13.41	95·98	60S	•	,		•	•		901
2.3	40 92	215,413	3.00	63.78	8,104	5.77	72:93	2,019	13:31	98-29	661		•	•		•	•	905
2.0	40.36	209,391	3.06	64.12	8,491	5.74	71.47	3,026	13-16	100 71	684	٠					•	906

DIX 11.

results of working
ted as one system.

	ы.	rn (R-M)	Pak		N.	HPR OFE	Pra m		9.	RNINGS	NET EA
Remarks	Net our dies.	Acting Xpuse	tross		Net earnin	Vorking		Gros garatn	quial	Porcer on Ca	nount in on-ands of rupees.
***************************************	 18	12	11		10	9		8	7	7	6
	Es.	na i	Re	, \	Re	Rs.	L.,	B			
	1 86	1.81	3 67	612	10,0	6,142	054	13,	92	15	17,22,20
The Journey of in the capital outlay for 1903 is di	1 97	1.76	3.75	110	7,0	6 48	258	12,	:4	5.	19,89,73
revision of the capital out av hitherto add- ine purchased by the State from Courante	203	1.53	3.6	570	7,0	6,811	3 1	11,	91	3:	20,87,17
way companies	20;	1 86	3.8)	ge i	7,0	7,017	731	31,	92	5.0	21.74,09
	193	1.92	3.85	599	7.5	7,5-3	16.2	1!-	83	57	22,10 90
•	718 P.	Thousa	SERIN PELS.	EXIE	(KING)	1101			<u></u>	s.	RUPEE
	Cross vy see errors or to her her uttout t by redeat Encland errors and missel- larges explained to the	General	1	Car-	m b.ve	Bu gue i ing.	Storn- lort and enod- ries	Elect to telegraph		venno es, m- r g ceal naterral nasirbo- non,	is store ery and norm
	35		ļ sa	323	31	20	79	:5	27	26	25
]	£-,19	1,13,70	2,70,70	   1,76,3	1,78,85	0,80,47	50,85	<b>7</b> ,:'2	25,68	,11,53	; 1,67 1
	26,74	1,08,91	2,02,19	1,52,5	6,11,5	(,88,00	96,06	7,81	27, 1	,10,90	3,07 ; 1
The fedals of column 193 to 27 are mura for figures shown in column 12 by the amount	1,00,19	1,25,67	370 3.	1 76,7	0.79,07	1,37,28	1 00,00	6,00	20,27	1,31,64	),14 1
Cawapene Buthwal link carpings.	1,05,00	1,80 93	3.31,02	1,84,0	70%;8	1 81,19	1 09,67	٤ 79	38,77	1,46,54	,63 1
1	1,1166	1 198 0 1	3 71 1	2,03+	7 72,80	5,10,21	1 66.76	1,63	37 20	51 54	3,58

carried and the average rate charged, and the train-mileage run by vailways in India.

HE A	VERAC	E RA	re chai	в <b>с</b> в.	Tra	LIIM MIA: STORT		18	Goo	Goods traffic				
Sraso 19010	N AND	VKN-	TOTAL PASSEN CARR	GERS				nalenge sigosta- an-nale-	Tous !		Average			
No.	Aver- age miles car- ried,	Average rate chresh per mile in pies.	No.	Aver- age miles- car- ried,	Coach- ing.	Goods.	Mixed.	Total train (includes no out tr	thou- sind-),	miles carried	claryod per nide in ples,			
49	50	51	12	53	51	15	56	57	58	59	ño 			
15,026	8-85	1.41	   193,618	40.03	21,768	re,019	31,781	92,527	15,507	157:54	568			
15,551	8.75	1 48	210,231	:30.00	25,889	26,308	31,4:8	95,900	17,084	159.93	5.64			
10,700	9.08	1.41	227,097	39.06	31,577	08,797	28,620	102,721	52,051	172-12	5 09			
18,029	9.16	1.12	248,157	59-90	83,191	:9,712	29,892	107,015	51,936	176:60	5:19			
19.468	9:57	1 38	271,063	89.43	37,175	41,693	31,014	114,551	58,869	165 97	5 32			
			ì								:			

## APPENDIX 12.

# General results of working each railway system.

N	имвия.	; ;								
Main bead.	Sob-head,	Radway system (wide Appendix 38).	Year,	Number of pessions of vertical (in their ands)	Quantity of goods and micerals carsio tin tonerads of terms.	Gross carnings on thousands of rupces).	Working express of thousands of of rupe(s)	Not earnings (in thousands of cupers)	Percentage of working expenses to gross carnings.	REMARKS,
		5' 6' GAUGE.			1 1					
		Bargal Central	1: 02 1: 73 1: 04 1: 05 19: 6	1,911 1,989 2,041 ‡1,670 §	159 206 235 176	13,17 15,69 15,60 16,66 §	7,43 19,01 10 20 \$5,03 \$	5,74 5,08 5,40 ‡1,58 §	56 43 66 36 65 40 \$76 28 \$	cond-half have been
1	(a), (l) and (e)	Pengal-Naggar	1903 1 04 1905 1906	6,172 6, 6, 9 1,715 8,102 9,5, 1	2,880 1,918 2,381 3,975 4,645	1,42,18 1,55,48 1,8/12 2,4 : 71 2 09/47	72,80 85,03 93,45 1,10, 8 1,27,95	69,38 70,46 95,87 1,34,03 1,41,51	51·20 51·09 49 31 45·23 47·49	included with East- ern Bengal State railway, broad gauge, § Included with the Eastern Bengal
2	(a), (c) to (f), (n) nucl (v)	Bunhay, Paroda and Contral	19 8 1: 03 19 6 1 705 1. 705	05,501 19,651 21,681 23,480 24,539	1 927 1,770 1,797 2,055 2,314	1,71.20 1,83,76 1,91,08 2,11,73 2,19,23	83,50 91,73 99,19 92,47 1,03,54	87,37 92,03 1,00,90 1,10,26 1,15,69	48-96 49-92 47-20 44-67 47-23	State railway, broad gauge.
3	(a)	Eastern Bengal State	1902 1905 1964 1965 1966	13,654 14,54 14,85 17,090 21,168	1,800 2,651 2,670 2:75 3,694	1 03/83 1,0 /22 1,08/77 1,18/00 1,41,12	50,03 51,39 57,50 64,14 83,13	53,80 50,83 50,97 53,56 51,90	48 18 50 27 53:14 54:51 55:10	
4	(a) to (d)	East Indian {	19/2 1903 1904 1905 1906	23,276 24,282 25,781 25,938 28,143	10,484 10,702 10,241 12,236 12,517	7,04,81 7,20,62 7,87,20 7,79,46 8,26,07	2,58,80 2,46,28 2,66,52 2,82,15 3,21,75	4,15,54 4,90,39 5,%,14 4,97,31 6,04,32	36 74 03:59 33 89 36 20 35:5	
5	(0)	Grent Itelian Peninsula {	1902 1903 11 04 1 05 1906	18,349 20,221 *2,454 25,233 27,331	7,278 4,518 1,042 5,676 6,859	4,24,25 4,08,09 5,80,20 6,30,44 6,41,02	2,12,87 2,30,14 2,02,53 3,05,37 3,22,01	2,11,38 2,38,20 2,93,57 3,25,07 7,22,01	50:17 49:18 49:96 48:44 50:00	
5	(b) to (g)	Indian Midland {	1962 1903 1904 1905 1906	2,510	1.049	1,09,63 +.00,33 *	55,67 49,68 *	53,96 59,65 *	50 78 49 52	* Included with the Great Indian Pen- insula railway.
6	(a) to (d)	Made	1962 1973 1974 1965 1905	13, 05 17,712 13,953 14,396 15,578	2,819 2,349 2,748 2,522 2,522	1,66,64 1,73,47 1,96,53 2,08,41 2,13,90	91,00 1,01,50 1,11,23 1,22,39 1,27,09	74.95 71.97 73,14 86,02 86,81	54°86 58 51 58 41 68 73 59 42	
8	(a) & (b)	Nizane's Guaranteed State	1902 1903 1904 1905 1905	1,75° 1,797 1,476 1,583 1,107	935 895 878 857 870	46,96 46,26 46,53 46,26 48,33	18,73 19,33 16,83 15,72 18,43	28,23 26,93 29,70 30,54 29,90	89·89 41.79 56·17 33·98 83·13	
9	(a) to (j)	North Western State—  Commercial Section {	1903 1903 1904 1905 1906	† † † †	† † † †	4,17,94 4,89,77 6,12,74 5,99,17 6,35,58	2,23,09 2,20,61 2,63,32 2,61,14 3,00,24	1,93,95 2,69,16 8,49,42 3,18,03 3,26,34	53·50 45·04 42·97 46·92 46·05	† Information not available.
		Militury Section	1902 1903 1904 19-5 1906	† † † †	† † † †	37,09 38,99 46,00 43,07 50,19	41,97 41,71 52,19 43,97 50,83	-4,88 -2,72 -6,19 -90 -54	113·16 106·98 113·47 102·09 101·07	
		Total {	1902 1903 1904 1905 1906	20,522 22,777 25,534 20,017 33,698	5,904 6,064 6,131 7,237 8,051	4,55,03 5,28,76 6,58,74 6,42,24 6,85,87	2.65,96 2,42,72 3.15,51 3,25,11 3,60,07	1,89 07 2,66,44 3,43,23 3,17,13 3,25,80	58·44 49·61 47·89 50·62 52·50	
10	(a) to (c)	Oudb and Robilkhand State	1902 1903 1904 1905 1906	8,332 8,902 9,776 10,797 11,869	2,302 2,250 2,541 2,310 2,256	1,34,18 1,42,18 1,55,60 1,56,99 1,68,01	65 81 68,49 82,95 92,21 88,53	65,87 73,64 72,65 64,78 79,48	51·28 48·19 53·31 58·74 52·69	
11	(0)	3' 3}" GAUGE.  Assam-Fougai {	1902 1903 1904 1905 1906	1,763 1,981 2,120 2,476 2,732	326 403 361 432 604	20,96 24 28 30,10 34,83 42,20	18,42 19,58 28,57 83,00 87,92	2,54, 4,70 1,53 1,93 4,28	57 88 50 64 94 92 94 75 89 86	×.

### APPENDIX 12-contd.

### General results of working each railway system-contd.

Nu	MBES,									
Main head.	Sub-head.	Railway systom (téde Appeudix 39).	Year.	Number of passengers carried (in thousands).	Quantity of goods and universis carried ( in thousands of tons).	Gross earnings (in thousands of rupees).		Net carnings tin thousanes of rapecs).	Percentage of working expenses to gross earn- ings,	Remarks.
12	(a) & (b)	8' 3%" GAUGE—confd.  Bengal and North-Western	1902 1903 1904 1905 1906	10,126 12,977 12,910 14,905 15,169	1,460 1,707 1,783 1,815 2,089	1,01, <b>5</b> 0 1,19,15 1,29,69 1,24,61 1,43,53	47,04 49,50 51,60 53,31 64,03	54,46 70,65 78,3 ) 70,30 70, 0	46:35 40:71 89:70 43:13 44:45	
13	(a) & (b)	Bengal Dooars	1º02 1º03 1904 1905 1906	362 443 519 456 453	91 121 171 194 201	5,27 6,58 7,61 8,52 9,93	2,69 3,28 3,56 4,35 4,05	2,58 3,20 3,45 4,47 5,88	51:01 49:87 62:02 41:32 40:79	
14	(a) to (d)	Bhavnagar-Gondal-Jumgad- Porbandar.	1902 1903 1904 1965 1966	1,506 1,600 1,938 2,105 2,270	245 264 502 284 316	16,85 	10,02 9,82 10,56 10,00 10,68	6.83 9.72 11,81 11,41 12,59	59-49 50:27 47:20 49 03 49:58	
15	(a)	Burma	1902 1903 1904 1905 1906	12,105 14,220 16,118 16,874 17,610	1,603 1,860 2,175 2,130 2,589	1,25,03 1,36,14 1,51,02 1,57,76 1,57,32	72,30 83,05 85,32 95,95 98,70	52.73 52.19 65.70 61,81 68,62	57:53 61:66 56:49 60:82 62:74	
16	(a)	Denghui {	1902 1908 1904 1905 1906	185 262 281 273 329	10 15 14 14 15	30 41 47 45 54	24 30 32 32 33	6 11 15 13 21	79 75 73:17 68 43 71 1) 61:11	
17	(a) & (b)	Dibru-šadiya {	1902 196 <b>3</b> 1904 1905 1906	002 29) 539 813 896	510 558 613 642 667	9,19 9,76 10,14 10,14 10,73	4.58 5,26 5,70 5,55 0,10	4,12 4,50 4,74 4,50 4,50 4,53	54/77 53/89 56/75 64/73 59/65	
3	(b) to (d)	Eastern Bengal State {	1902 1903 1904 1905 1906	*	2,049 * * *	80,81 85,50 89,55 80,38 1,09,60	30,93 44,28 50 17 44,63 50,23	40,88 41,22 39,38 44,70 50,37	49 41 51 78 56 02 4 ) 99 5 ) 04	* Included "with Eastern Bengal Stato Railway (5 6" gauge).
8	(e)	Nyderabad-Godavari Valley	1902 1903 1904 1905 1906	1,216 1,183 1,264 1,591 1,803	5×7 546 34) 873 343	22,88 12,14 22,13 29,64 30,43	13,20 13,24 14,37 16,35 16,11	9,69 8,66 7,75 13,79 14,22	57 69 59:38 64:97 £5 16 53:12	
18	(a) to (v)	Jodbpur-Bikaner {	1902 1903 1904 1905 1906	1,878 1,560 1,702 1,070 2,107	456 403 439 471 587	25,02 27,44 20,60 35,24 40,76	13,76 13,24 13,51 14,91 18,66	11.98 14,20 17,09 20,33 22,10	52:18 43:16 44:15 42:31 45:78	
19	(a)	Morvi {	1902 1903 1904 1905 1906	248 257 298 286 295	19 19 84 49 34	3,05 2,98 3,55 8,23 8,08	1,92 1,53 1,61 1,49 1,48	1,13 1,45 1,89 1,74 1,60	62:85 51:43 46:73 46:13 48:15	
6	(e)&(f)	Nilgiri and Shoranur-Cochin	1903 1903 1904 1905 1906	339 695 724 782 742	40 156 119 105 105	4,14 6,28 6,83 7,02 7,12	2,59 8,56 4,28 4,92 5,19	1,85 2,72 2,60 2,10 1,93	58-23 56-53 61-57 70-09 72-89	

### APPENDIX 12-contd.

#### General results of working each railway system—contd.

No	M888.				Quantity of		N - 1 "	× ,	F	
Main head.	Sub-heal,	Railway sistem (ride Apprudix 34).	Year.	Number of prisongers extract (in thousands).	minerals enried in thousands of tons)	Grass carre- turs (in thousands of rupers).	Working expenses in thousands of fupecal,	Net earnings (in thousands of rupees).	Freentage of working expenses to gross carnings,	Remades,
		3' 3' GAUGE-concld.					<b>\</b>			
2	(b) & (g) 10 (m)	Rajputana-Malwa	1962 1003 1904 19 5 1906	17,091 12,447 17,194 15,2/3 16,8,4	3,2°0 1,976 2,117 2,669 2,691	2,65,04 2,63,74 2,61,67 2,63,78 2,59,52	1,25,79 1,10,11 3,14,80 1,25,85 1,56,96	1,89,85 1,47,63 1,26,57 1,67,48 1,62,53	47 46 49 67 47 56 42 91 47 31	,
20	(1) & (b)	R.hilkund and Kurmon	1902 1903 1904 1905 1906	7,592 1,546 1,6-3 1,772 2,867	432 439 439 441 102	19,64 18,16 19,15 19,8 24,5)	8,76 8,47 8,93 10,13 12,57	9,58 9,69 10,32 9,75 12,02	47 00 46 65 4676 7 50796 51 12	
21	") to (/)		1902 1903 1904 1905 1906	17,387 17,878 19,164 19,383 20,3 1	1,410 3,516 3,103 3,105 3 233	1, 5,55 1,31,40 1,41,03	10,97 51,81 60,92 69,77 81,00	59,13 77,04 78,75 71,26 63,63	45:83 40:21 45:10 49:47 55:09	
22	(a) to (1)	Southern Mahrat'a	19 2 19 3 1 04 1 05 19 5 1906	7,178 5,698 7,178 8,401 5,991	1,016 1,089 1,331 1,342 1,115	93,17 95, 8 1,01,95 1,14 26 1,22,82	60,65 58,93 68, 0 60,36 74,12	32,52 30,12 39,45 44,90 48,70	61 51	
23	(4)	Udaipur-Chitor	19)2 1:03 1:04 19.5 1:06	179 10 0 162 257 270	27 15 11 16 27	2,17 1,78 1,51 2,08 2,15		97 67 53 1 04 1,36	£0.00	
		2' 6" gauge,								
24	(1)	Barnset-Basirhat Light	1902 1903 1904 1905 1906	  295 312						
25	(a)	Barsi Light	1002 1003 1004 1905 1906	72 62 77 101 177	50 45 50 82 57	1,30 1,67 2,19	77 1,02 80	53 65 1,39	59 28 61.09 3 ; 53	
26	(a)	Bukhtiarpore-Behar Light,	1902 1993 1904 1905 1906	118 298 252 274	25 19	J,14 89	48 58	61	41·90 59·55	
27	(a)	Cutch	{ 1902 1903 1904 1905 1903	3					  27·27 50 c0	
20	(a)	Kalka-Simla	1902 1903 1904 1905 1906	 6 84 97 96	25 27	5,90 7,55	3.82 3.51	2,08	46.68	

#### APPENDIX 12-concld.

# General results of working Each railway system—concld.

N	DEBER.						T	1	1	
Main head.	Sub-bead,	Railway system. (vide Appendix 38.)	Year.	Number of passengers carried (in thousands).	Quantity of goods and miterals carried (in thousands of tons).	Gross earn- ings (in thousauds of rupeus).	Working expenses (in thousands of rupecs).	Net earnings (in thousands of rupces).	Percentage of working expenses to gross caruing.	Enwares.
<b>⊮ 1</b>	(0)	2' 8" GAUGE—concld.  Mourbhauj {	1902 1908 1904 1905 1906	   30 64	   13 12	  31 45	   24 23	  7 22	  77-42 51-11	
1	(d)	Parlakimedi Light {	1902 1903 1904 1905 1905	52 * 59 68 82	4 7 10 7	 17 21 27 21	 27 22 23 81	 10 1 10	 155·58 106·29 85·19 147·62	
20	(v)	Powayan Light {	1902 1903 1904 1905 1906	258 269 272 299 322	24 22 25 30 32	78 78 92 1,00	53 43 47 56 60	23 29 31 86 40	70-24 60-84 60-34 60-87 60-00	, ,
*		Ranaghat-Krishnagar Light	1902 1903 1904 1905 1906	241 248 + †	7 †	76 88 111 †	55 53 129 †	21 83 ‡12 †	71 97 60-86 70-24 †	†Included with the Eastern Bengal State Bailway motre and special gauges.
32	(a)	Tatakeshwar-Magra Light	1902 1903 1904 1905 1906	428 427 473 456 508	11 17 23 22 26	84 85 90 87 1,00	59 60 62 65 67	25 25 28 22 33	70·52 70·40 69·20 74·71 67 00	Figures shown only for the first-half of the year. Those for the second-half have been included with the Eastern Bengal State Bail-
33	( <b>a</b> )	Tezporc-Balipara Light	1902 1903 1904 1905 1906	125 145 149 156 156	8 9 8 14 16	85 95 88 1,03 1,15	63 67 71 76 50	22 28 17 27 36	74:53 70:72 50:43 73:79 69:57	way metre and spe- cial gauges,
6	(g) & (h)	Morapur-Dharmappuri and Tirupattur-Krishnagiri	1902 1908 1904 1905 1906	  37 245	   2	  13 79	   14 81	  -1 -2	 107-69 102-53	•
35	(a)	2' 0" GAUGE.  Darjeeling-Himolayan	1902 1903 1904 1905 1906	80 109 139 137 134	33 44 44 44 44	8,50 9,62 10,45 9,72 9,81	4,72 5,45 5,73 5,61 5,78	3,78 4,17 4,72 4,11 4,03	55-54 56-65 <b>53-4</b> 6 57-72 58-92	
86	(a)	Howrah-Amta Light	1902 1903 1904 1905 1906	783 808 855 940 993	14 17 13 17 29	2,65 2,77 2,97 8,29 8,51	1,32 1,39 1,42 1,51 1,74	1,83 1,38 1,55 1,78 1,77	49:86 59:82 47:82 45:90 49: <b>5</b> 7	
37	(a)	Howrsh-Sheakhala Light	1902 1903 1904 1905 1906	814 343 346 351 864	6 7 6 6 7	82 87 86 88 91	50 52 47 50 54	32 35 89 38 37	61:33 59:85 54:72 56:82 59:84	
38	(a)	Jorhat	1902 1903 1904 1905 1906	130 155 163 167 163	12 12 10 10	87 91 74 70 98	90 77 78 76 80	-3 14 -4 3 13	104·22 85·02 105·17 96·20 86·02	

#### Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India

N	UMBER.			-	I									
		Railway system, víds Appendix	38.	١	Apparel i ing dr haberda nulliner forms, a ments, b	apety, ishery, y, uui- ecoutre- oots and	Conl an carried public foreign i	for the	1. F	iaw.	(a Twist su Euro		Twist an	(5) id yarı li <b>x</b> ın,
Water Bear.	Sub-head.				Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Barniogs.
		5' 6" gauge.			Tons	Rs.	Tøns.	R#.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	(a), (b) & (s)	Bongal-Nagpur		.	378	8,566	2,012,391	52,85,536	19,360	2,38,008	4,610	89,770	15,733	1,86,4
2	(a), (c) to (f)	Bombay, Baroda and Central India .		.	649	14,455	77,403	3,22,675	172,186	17,60,407	622	9,028	15,918	2,41,
3	& (n) & (0)	Eastern Bongal State	./ .		833	9,101	562,548	1,47,352	3,261	12,456	1,921	14,049	3,567	29,
4		East Indians		.	4,098	1,00,790	6,484,721	2,16,25,490	70,052	0,42,972	1,862	49,050	16,762	2,08,
- 5		Great Indian Peninsula	<i>i</i> .		1,322	51,968	219,622	6,69,398	363,527	87,23,423	12,340	2,20,869	18,086	2,00,
8	(a) to (d)	Mudras	٠		645	15,370	361,826	8,31,500	38,365	3,58,600	4,905	43,560	16,365	1,40,
В	(a) & (b)	Nisam's Guaranteed State			90	1,785	399,209	11,75,266	9,743	53,468	3,190	34,927	2,732	38,
5 9	(6) 6 (8)	North Western State		- 1	1,260	97,916	163,969	4,20,448	83,917	9,34,008	1,623	32,866	8,098	1,38,
		Ondh and Robilkhand State			666	8,027	85,411	2,69,378	28,096	1,52,317	2,171	19,351	6,786	47
)	<b>"</b> "	3' 31" gauge.		1		,	,	-,,			"	,	"-"	-7
		Assam-Bengal		- 1	128	1,711	22,806	63,498	2,570	19,627	677	8,022	376	3,
		Bengal and North-Western		١.	903	11,939	119,559	2,51,783	1,393	16,565	408	5,343	6,095	Ç9
2	"	Bengal-Dooars	•	-	52	91	13,951	58,414	1,000	3	18	68	40	*
3		Bhavnagar-Gondal-Junagad-Porbandar	• •	.	370	2,941	11,064	11,285	32,260	1,51,761	48	329	1,114	5
4		Burma		1	587	10,415	1,155	1,588	5,426	27,217	3,468	66,670	440	6,
5			• •	٠,			i i		-				1 1	
3		Deoghur		٠.	"	•••	***					•••		
7		Dibru-Sadiya		٠,			562,200	4,82,589		2,332				
8	(0)	Hyderabad-Godavari Valley			63	1,775	8,937	40.046	33,552	4,00,158	398	7,297	1,039	21
8		Jodhpur-Bikaner			267	3,106	22,403	65,603	17,805	78,501	13	87	622	3,
6	(#) to (A)	Madras		- 1	59	559	888	H18	525	3,930	403	1,122	1,239	4
В		Morvi	•	- 1	31	171	157	169	2,362	14,513	1	6	57	l
2	(b) & (g) to (m)	Rajputana-Malwa	•	•	1,031	25,259	34,279	1,16,184	90,990	10,87,800	(195	9,485	12,715	2,97
0	(a) & (b)	Robilkund and Kumson		·	386	3,551	1,292	1,497	1,011	8,242	139	622	2,338	10,
1	- 1	South Indian		·	367	2,253	10,021	25,790	37,434	1,86,271	2,755	81,943	10,359	78
2		Southern Mahratta		·	305	4,355	9,055	47,030	105,665	6,11,474	2,386	32,131	12,339	1,26
3		Udaipur-Chitor			16	120	69	90	1,872	7,345	δ	40	30	
		Barasot-Basirhat Light												١
4		Barsi Light			8	39	36	72	9,412	24,360	88	329	178	
5	1	Bukhtiarpore-Behar Light												١.
8		Cutch		1			43	718	131	340	62	211		"
7		Kalka-Simla			314	8,333	4,686	41,771	1	34	2	58	10	Ι "
0	(0)	Mourbhauj			1	2	201	345	,	3		"	19	
1	(d)	Parlakimedi Light		•	4	3			`	۱ ۱	*		189	1
1	(0)	Powayan Light			*	٠ ا						"		۱.
0		Tarakeshwar-Magra Light					142	125			l		I	"
3	"	Tezpore-Balipara Light					2,946	7,684		139				"
13	"	2' 0" gauge.	- •	Ĭ	"			1	l	1	ł			
		Darjeeling-Himniayan			203	5,939	1,657	15,302		100		113	193	3
ı		Howrah-Amta Light							`					
16		Howrah-Sheakhala Light 4	•				<u> </u>		]					
7	"	Jorhat	•				<u></u>							
18						<u> </u>					<b> </b>			_
		To	TAL 1906	٠	17,922	3,99,672	11,197,407	3,22,92,989	1,126,121	1,57,09,681	44,794	6,28,354	153,485	18,63
;		т	OTAL 1905	1	17,909	4,09,612	10,202,501	2,89,96,878	1,232,702	1,85,70,936	46,167	8,85,428	151,398	18,86
		19	WCBRAS H				-	32,96,110		***		٠	2,037	24
						•								

DIX 17.

#### earnings therefrom during the calendar year 1909.

and is therefore not the same as the total production].

	I	11.							1	٧.				٧.					,
	COTTO	٧.								•			DRU	īgs.				•	Монова.
-	Mayuya	CTURBD.					•		Chem	icals,			2,	Non-int	OXICATIS	ıg.			
	Piece- Europ	goods,	Pieco-	d) goods, iau.	(c)	e) iere.	Te	TAL.	exce nait	oting netre.	1. Interother opin	than	Med	s) icinal ations.	Othe	b) era.	Tv	PTAR.	Main head,
	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings	Quantity.	Barnings.	Quantity.	Earninge,	
	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons,	Rs.	Tons.	Ra.	Tons.	Ra.	Tons.	Ra.	Tons.	Rø,	Fons.	Ra,	
1	9,335	1,04,331		1,06,206			56,231	6,74,908	348	5,294	50	1,002			1,394	17,004	1,460	18,006	1
	14,485	3,01,659	22,705	3,60,908	1,091	22,966	227,007	28,97,015	750	14,498	40	1,057	39	797	2,846	42,263	2,925	44,107	2 .
1		2,63,193	2,563	22,597			34,796	8,30,799	1,150	12, 01	98	1,308	10	708	1,360	17,764	1,507	19,836	8
1	1.,	15,41,285	9,910	1,07,163	3,307	57,029	163,153	29,67,080	0,854	38,501	132 225	1,914	781	10,761	2,363	40,049	3,290	73,670	
1	7,482	1,01,790	17,012	3,28,891 1,16,069	1,560	37,088 1,26 9	447,831 77,792	1,04,65,463 7,61,614	156	3,211	1	8,156 20	275 946	9,501	2,216 2,876	49,897 31,546	2,716 3,223	66,914 41,070	8
	7,482 3,074	45,946	1,157	16,504	60	1,20 5	19,005	1.89,882	188	2,554	83	492	117	2,326	954	7,617	1,103	10,435	8
		4,99,450	37,774	8,00,800	1,548	33,615	152,031	24,39,016	5,408	74,367	308	7,186	761	20,172	8,164	1,20,312	9,323	1,47,680	
	7,360	51,316	5,896	46,485	<b>3</b> 61	3,216	50,600	3,22,249	181	1,661	113	2,707	126	1,336	954	8,660	1,063	12,712	10
	2,315	22,018	549	4,478	11	119	6,408	<i>5</i> 3, <b>2</b> 69	325	2,352	6	123	83	1,242	511	3,681	603	<b>₽</b> ,0 <b>4</b> 6	11
1	17471	1,76,400	6,088	55,295	378	4,708	31,823	3,27,436	1,640	4,484	88	1,478	138	1,376	20,259	95,350	20,485	98,213	12
	632	3,473	71	583			762	4,300	441	3,882	1	2	•••	542	466	5,861	157	5,965	18
	894	6,422	1,558	10,074	7	71	38,887 16,268	1,74,681	53 128	500 3,057	25	319	73 92	2,226	92 273	683	190	1,383	14
	6,398	1,00,002	52l 			148		2,16,761					02			3,636	365	6,062	15 16
							191	2,382			400	4,108					400	4,105	17
	955	16,621	1,290	19,273	17	278	37,200	4,64,908	20	213	5	118	15	304	53	637	78	1,059	8
١	1,215	10,257	3,028	19,644	47	408	22,730	1,10,788	67	734	9	130	30	163	277	2,540	316	3,158	18
	300	1,268	470	2,185			2,937	19,381	21	245			29	316	359	1,513	387	1,820	6
	10	206	154	630	8	14	2,617	15,583	9	45	163	2015	Ð	35	10	20	182	350	19
	14,297	3,41,107	18,514	3,93,743	1,139	25,471	138,340	21,54,674	312	6,609	142	2,820	33	846	1,896	34,819	2,071	38,565	2
1	768	3,529	2,321	13,031	63 325	541	6,535	32,681	77	643	27 101	332 934	905	331 7,413	1,440	8,491	1,488	9,344	20
	8,242	1,11,402 67,881	4,562 5,694	38,851 75,172	569	2,217 0,983	59,677 131,206	4,49,109 8,19,896	118 733	2,527 8,142	40	639	198	2,952	430	10,493 5,115	2,007 664	10,8 <b>12</b> 8,709	21 22
	4,553 220	1,552	362	2,924	5	45	3,491	12,078		1	8	42			48	336	51	378	23
																			24 .
1	279	1,157	260	871	17	54	10,234	27,201	23	71			2	11	50	147	52	158	25
1																	•••		26
	68	210	•••		•••		261	770	···										27
1	176	3,666	75	1,495	25	805	289 103	5,990 (	7	179	2	52	40	1,064	111	950	159	2,066	80
	76	107	7 14	, 17 16			217	176 200	2:	1 2					12	14	19	14	1
-	14 219	367					219	867		•					"	l°	"	_	20
	64	141	,				64	141				•••						***	33
							13	139					8	62				63	23
	368	10,143	86	3,974	26	695	621	17,871					70	1,209	42	1,285	112	2,534	35
	•••				١														36
	***																		37
	••• ••••		<u> </u>		<u></u>					···									39
	240,219	47,86,907	160,824	26,17,948	10,599	1,98,352		3,67,52,848	10,888	2,91,714	3,110	33,369	4,236	97,778	50,400	5,10,980	56,812	6,42,095	
1	246,598	49,34,385	149,005	23,46,666	8,657	1,86,879	1,829,882	9,84,08,487	15,611	2,59,020	3,221	37,503	3,706	92,721	51,484	5,29,446	57,360	6,68,679	· : . ·
Samuel	* •••		16,469	271,183	1,942	12,473		;	4,977	33,094	<u></u>		531	5,062			,	•••	
	5,874	98,478					92,890	26,03,689			111	4,138			. 958	17,406	598	16,577	

ş.

#### Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India

VM	1933.						<b>- ♣</b>		• Dyn	V]								
1		•		1				i			· · · · · · ·	•	<del></del>					
		Railway system, vide Appendix 38.	Alizaria Aniliue	ne and	(2 Cuto		s) ibal	- 1	(4 Myrabo	1	(( Tanning	:	(6 Turm		(7 Oth		Тот	'Alija
	Eub-head.		Quantity.	Esmings.	Cuantify.	Earnings.	Çnantity.	Earnings.	Quantity.	Eareings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
•			Tons.	Rs.	Tons.	Rn.	Tons.	Кя	Tons.	R4.	Tous.	Re.	Tons.	Rs.	T			-
		5' 6" gauge.							2000	,			Tous.	168.	Tons.	Rs.	Tons.	R
1	(a), (b)	Bengal-Nagpur						٠.	33,174	2,08,251			6,697	6 <b>5,9</b> 85	2,953	20,494	43,824	
	& (e) (a), (c) to (f) & (n)	Bombay, Baroda and Central India.	1,190	24,153	200	1,35%	37	680	96	1,150	453	2,871	1,983	38,240	2,952	38,123	6,620	1,06,
I	& (n) & (o)				i													
	- i	Eastern Bengal State.			179	1,501	85	1,157					5,010	31,009	281	1,997	5,555	36,7
		East Indian	100	3,731	ì	16,57/3	1,887	30,251	5,241	42,174	4,128	10,145	6,990	1,40,186	4,371	52,763	24,239	3,96,
		Great Indian Peninsu's	1,840	18,338	1,165	27,350	366	7,284	27,845	1,96,'06	14,531	63,580	9,106	1,30,057	3,502	47,419	58,351	5,20,
	(a) to (d)	Madras	535	6,133	176	1,199	928	12,613	2,810	16,701	24,953	1,61,616	10,528	73,050	1,097	11,649	41,025	2,82,
	(a) & (b)	Nizam's Guaranteed State, North Wostern State .	319	3,808	55	427	3	88	306	1,608	2,805	14,957	701	7,890	136	1,603	4,415	30,8
-		Ondh and Robilkhand	692	20,883	73	623	1,491	41,105	443	4,213	1,445	5,109	4,682	69,657	8,037	84,584	16,885	2,17,2
		State.	61	721	; 461 	2,095	80	714	191	1,345	426	1,370	1,653	17,166	265	2,690	3,137	27,0
I		3' 3}" gaugo.			ĺ	1					1							
		Assam-Bengul			27	126			2	30	1	5	72	980	8	179	110	1,5
1	•••	Bengal and North-	33	419	1,146	11,602	1,201	10,800	165	1,495	886	2,567	3,972	37,087	737	7,672	8,140	71,6
1	•••	Bengal-Dooars											29	104	45	222	74	
1	•••	Bharnagar Gondal- Junagad-Porbandar.	111	750	9	56	4	34	94	457	1	4	221	1,103	359	1,687	793	4,0
١	***	Burma	•••		2,915	28,637		7	В	128	278	2,671	881	6,773	79	861	4,161	39,0
1	***	Deoghur			•			•••										
	***	Dibru-Sadiya																
1	(0)	Hyderabad-Godavari Valley.	25	427	48	699	64)	809	43	172	222	603	275	3,303	93	1,113	768	7,3
		Jodhpur-Bikaner	17	143	1	8	100	1,736	22	86	1,907	9,603	212	1,851	2,096	11,999	4,364	24,9
	(e) to (b)	Madras	3	13		1	9	43	20	25	161	480	77	214	53	407	323	1,1
- 1	 (8) & (g)	1 .	1,361	33,838	205	1,815	208	4,549	1	1			11	43	23	86	40	1
- 11	to (m) (a) & (b)	ì	12	85	433	2,002	21	101	359	3,510	1,865	10,518	2,381	30,161	2,062	31,484	8,434	1,15,
ľ		Kumaen. South Indian	534	5,981	201	1,176	334	2,603	593	3,990	889	2,699	749	8,777	79	746	2,313	9,0
		Southern Mahratta .	349	4,975	257	2,092	228	2,523	8,996	36,958	21,727	47,860 68,006	2,709 6,635	20,027	761	7,177	11,125	88,0
1		Udaipur-Chitor	20	110	1	5	4	34	2	12	2	12	58	49,441	623 2 <b>6</b>	5,336 186	38,835	1,60,
		2′ 6″ gauge.							_	-	1				30	100	113	1
1	•••	Baraset-Pasirhat Light										! !	l			ا		
-		Raral Light	14	43	30	71			16	36	. 1	4	404	1,113	53	166	517	1.4
-		Bukhtlarpore-Beliar Light.											<b></b>					
	•••	Cutch									•	<i></i>			27	74	27	<u>"</u>
-		Kalka-Simla		1	1	0					99	593	4	Hì	36	833	140	1,4
1	(c)	Mourbhanj							35	57	21	54	7	16	3	0	09	1
	(d)	Parlakimedi Light .		·					170	209	142	16.	108	97		1	418	
1	(0)	Powayan Light																
١	•••	Tarakeshwar-Magra Light.							•••	ļ			*					
١	•••	Texpore-Ballpara Light					-			i								
		2' 0" gauge.	1	:									1					
1		Darjeeling-Himaleyan Howrah-Amta Light .			3	50		3				•••	3	43	36	776	41	8
1	4.	Howran-Amia Light .					•••								***	***		
1	***	Light. Jornat									-	•			,,,,	•••		
1	***						"										***	
1		TOTAL 1908 .	7,621	1,54,568	9,015	1,00,881	7,050	1,17,734	50,666	6,08,747	83,056	4,05,373	66,159	7,10,507	80,187	3,82,040	2,83 ,754	24,20
-	.	TOTAL 1905 .	7,130	1,60,301	8,953	95,176	6,400	1,06,808	79,278	6,75,376	68,621	3,38,740	63,191	6,61,013	30,970	3,50,694	0,64,842	_
İ		INCREASE .	491	<u> </u>	R2	5,676	551	10,926	1,889		14,285	96,683	2,968	40,494		·	18,919	41,7
1		Ducanasu .		5,833						66,629					783	18,554		
								1			104	***		1			1 ***	

DIX 17—continued.

#### earnings therefrom during the calendar year 1906.

nd is therefore not the same as the total production.]

		v	711			V	III.			-,X1)	continued or	following	pago.)	****************		]
		For	DER.						*		GRAIN AN	D Pulem.				Number.
*	1) cake,	liay, st	2) traw and ass.	To	tal.	Fruits a ables,	nd voget- fresh.		1) nd pulse.	1 .	2) ad Bajra.		3) he husk.	1	(4) n the husk,	Main head.
Quanti'y.	Esmings,	Quantity.	Estaings.	Q.antity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quentity.	Earnings.	4000
Tons.	Rs.	Tons,	Ra.	Tons.	Rs.	Tons.	Rн.	Tons.	R4,	Tons.	Rs.	Tons.	Re.	Tons.	Rs.	
6,137	29,526	6,8	31,084	11,777	6 <del>3</del> ,510	7,508	59,702	89,513	7,52,501	3,~61	17,396	150,315	7,24,036	939,731	23,95,561	1
11,696	81,370	128,628	7,10,914	14),324	7,95,494	80,370	1,61,206	100,507	5,H0,781	29,35	1,30,194	7,860	30,436	85,501	3,61,790	1
12,469	29,184	22,840	32,441	33,200	61,625	9,435	30,829	49,433	1,73,040			273,811	<b>9</b> ,19,785	905 - 09	001241	
38,009	1,97,414	36,097	89,308	76,700	2,48,712	9,720	1,37,247	257,620	17,31,061	 ●8 870	2,67,821	£4,824	3, 10,731	305,564	8,94,344 13,59,568	4
29,849	1,37,070	71,356	4,34,707	98,201	5,75,567	17,787	1,75,187	803,075	28,42,045	249,608	17,63,611	2,100	8,868	112,301	7,61,668	5
12,213	54,109	3,317	13,020	15,560	64,720	16,913	1,0-,'r17	98,410	6,21,911	118,17	7,52,261	140,577	6,34,392	216,239	9,45,765	6
911	5,201	2,758	11,618	3,093	19,914	2,726	19,455	24,786	10,5,191	51316	1,91,6:5	1,0 .7	6,000	20,533	1,30,803	8
11,270	51,204	8%,034	3, 49,413	100,304	3,50,077	26.7 '7	3,04,590	466,948	37,40,352	177,6 3	11,05,046	19,068	1,85,600	195,516	18,02,869	•
4,975	14,073	23,705	65,309	28,6-3	85,232	10,259	43,901	91,116	3,12,759	37,728	1,47,/90	12,000	72,500	32,600	1,30,251	10
2,159	9,103	1,100	5,718	3,319	14,880	1,325	6,117	4,757	80,504			18,757	56,379	185,251	6,37,915	11
7,677	33,9-3	4,219	11,16à	11,017	48,119	22,03L	71,53?	10, 369	4,02,024	19,243	1,00,193	64,416	2,61,600	219,805	8, 84,613	12
150	2,1147	417	1,350	G-1G	3,470	25	144	2,650	8,110			2,835	4, 153	16,283	50,205	13
871	4,876	3, 1,3	11,492	1,321	16,7:8	4,779	22,275	7,018	19,94,	19,658	53,560	324	1,183	10,574	39,195	14
1,766	0,781	მოპ	4,316	2,649	11,100	31,075	2,32,126	25,738	1,81,73)	1,414	15,474	595,91R	24,09,75	+3,9.6	4,62,751	15
•••						•						•••				16
•••							•••	1,511	10,785				•	17,102	78,421	17
2,620	11,173	105	419	2,9:5	11,621	721	6,203	12,256	62,00J	39,601	2,09,850	71	171	14,253	76,277	8
163 680	1,417	10,291 60	23,666	10,157	24,255 1,727	1,309 800	7,523 2,631	17,778	94,9 6	89,921	4,71,640	5,267	17,350	46,9-5	2,09,725	18
43	73	7.1	222	116	295	176	434	3,272 1,321	1,869	217 477	783	5,851 16	7,797	207	42,315 568	19
5,333	21,080	125,123	5,03,931	130,153	6,25,911	30,871	2,67,532	167,947	17,51,616		6,87,10	2,799	24,137	89,785	3,91,452	2
447	1,3.4	6,319	17,263	6,795	JN 657	4,130	20,095	31,803	85,063	:	12,77)	8,120	37,740	10,214	31,540	30
42,187	1,33,424	656	3,491	42,613	1,36,919	31,484	1,73,331	61,511	2,83,8-5	,	2,10,622	123,027	4,09,317	141,349	5,66,255	21
0,227	32,916	17,549	73,174	. <b>2</b> 6,770	1,00,120	11,608	75,429	59,H01	3,50,243	119,600	7,68, 11 5	13,8:3	53,460	72,793	6,01,537	39
15	51	654	2,432	669	2,483	111	641	1,584	5,213	ьо	203	4	17	771	3,005	23
***						•••										24
89	213	7	13	96	226	41	134	4,285	9,799	6,416	13,954	136	290	1,953	2,826	26
***																26
***					·=	8	17	207	5/19	2,563	8,631			852	2,476	27
100	1,110 3	421 16	3,031	524 17	5,06 <b>4</b>	823 86	5,039 97	1,835	16,638	45 1	362	19 827	135	593	5,711	\$0 1
1 25	23	2	32	27	25	23	20	73 409	155 864	1	1	1,001	747	1,139	8,198 986	1
						***		524	846							20
7,423	2,02	5	5	1,428	3,007	1,790	1,540	19	28			8,304	3,476	108	119	82
971	2,010	•••		971	2,010			263	1,260			496	2,343			83
53	553	10	148	63	701	92	1,967	1,335	13,790		***	14	197	12,678	1,48,801	35
m		•••													""	36
•••		<i></i>														87
															<b></b>	\$6
199,764	8,72,291	- 554,661	24,10,478	758,425	32,68,764	277,453	18,58,895	1,980,490	1,39,42,142	1,142,250	69,93,255	1,577,861	#5,33,534	2,500,402	1,24,75,853	
195,031	8,31,663	819,919	13,88,067	6 514,944	21,86,720	276,655	19,39,753	1,691,688	1,08,59,255		80,53,638	1,300,759	58,00,665	2,049,109		
4,733	40,629	239,748	10,01,410	243,481	11,02,044	798	19,138	288,811	30,82,887			209,592	6,59,929	457,351	1 3,45,427	
			,,,		٠					27,083	10,61,358	,,,,				·
# 1.	1					L		l	1	1	}	1	1	1	1	l

13

APPEN

#### Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India

Fig.   Fig.	1	Number.		_				71					~	
Part	<b>-</b> -			İ	*		GRAI	N AND P	ULSEcone	eld.				
			- -	-		at.		- 1		1	Tor	AL,		Him
S   O'   GANGE   Frame   Fra													Dressed or	tanned
1 (c), (c) A (c)   Despair Nargers		Sub-head,			Quantity.	Earnuses.	Queatity.	Eatungs.	Quantity,	Earlings	Quantity.	Earnings.	Quantity.	Earnings.
(a) (b) (c) (c) (c)   Rombins, Baroles and Central India   Co., no   S., 1/1.0   S., 1/1			5/ Q# ganga		Tons	E4.	Tons,	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
Control   Cont	,	(a), (b) & (c)			59, 105	5.29,558	4.911	39,910	6.750	21,504	618,500	43.71.626		
A Col   A Col   Col	- 1	(a), (c) to (f)	Bombay, Baroda and Central India		- 1		4	1		- 1	- 1	1		
6 Ext todina	- 1	& (m) & (v)	Eastern Bengal State		2,154	7,156	11,341	87,692	5,794	19,781	617,770	20,01,049	25,785	1,40,0
(a) to (J) Mudras (b) (a) Kill Niran's Guazantord State (c) (a) (b) Niran's Guazantord State (c) (a) (c) Niran's Guazantord State (c) (c) (c) Niran's Guazantord State (c) (c) (c) Niran's Guazantord State (c) (c) (c) Niran's Guazantord State (c) (c) Niran's Guazantord State (c) (c) Niran's Guazantord State (c) (c) Niran's Guazantord State (c) (c) Niran's Guazantord State (c) (c) Niran's Guazantord State (c) (c) Niran's Guazantord State (c) (c) Niran's Guazantord State (c) (c) Niran's Guazantord State (c) (c) Niran's Guazantord State (c) Niran's Guazantord Stat	4		East Indian	$\cdot$	283,902	22,75,257	51,41/5	4,37,791	77,107	1,30,718	1,120,982	65,35,950	561	9,
(c) 2. (1) Nirum's Grazansteed State	5		Great Indian Peninsula		175 915	13,85,208	24,231	2,15,317	19,212	3,58,958	916,832	71,35,925	76	1,
North Western State		(a) to (d)	Madras	.	3,318	17,639	5.616	27,906	61,897	3,89,896	612,024	32,91,482	1,303	12,9
Coult and Robitkianed State	•	(a) & (b)	Nizam's Guaranteed State	. [	2,654	13,063	1,662	9,938	1,310	0,329	105,298	4,84,067	1	
A rease-Berriel	,		North Western State		1,169,951	1,22,01,138	69,304	2,97,662	96,589	5,41,843	2,214,972	1,05,93,610	179	1
Avam-Beegal 46 277 1,700 13,175 15 26 20,013 73,042	,		Oudh and Robilkband State		127,173	7,60,858	13,002	69,047	96,323	4,70,253	400,191	19,63,206		
Rengal and North-Western			3' 3\" gauge.											
	١		Азчат-Вендаі		46	267	1,939	13,179	1/3	580	210,814	7,39,828	p	
			Bengal and North-Western		12,726	3,03,114	4,213	33,149	220,6-7	11,91,131	701,094	31,90,165	8	
Hurms	,		Bergal-Dooars		1	н	668	3,660	1,012	3,033	25,411	70,919	177	1,
Descript	6		Bhavnagar-Gondal-Junagad-Porbandar .	$\cdot$	5,632	17,240	260	1,118	4,150	23,613	52,063	1,56,283	6	
7 (   Dibre-Saliya.	5		Burms	$\cdot$	2,619	13,110	7,811	68 976	6,230	43,815	712,107	35,71,037	53	
B	8			-					•••					•••
Southern Maintata   1,700   1,1,470   1,1,470   1,1,50	7	***	-		i	1	i		1		i			
6 () to (8) Madrae	В	(e)				1						(		
More	9	1	•			1		1	1		1	(	4	
2 (a) & (g) to (m) Rijputane-Malwa	6	(r) to (h)				1		· ·	1			l	10	
10	9	1				1	1				1	i '	1 1	•••
South Indian			1			1					1		1 1	
Southern Mahratta		į.	1			1					i		1 1	
Udapur-Chitor		1	l			ł ł		1			1	i	1	19,
2 8" gaugo.  Barsact-Bastrhat Light		i	1			1		i			1	1	1	
Haraset-Basirhat Light		- "	DI Oli matrica	-									"	
### Barst Light			1									l		ĺ
		·-	1			1 1		ł			ł	1	1	
Cutch			1 " "			1 1		1	l	i	1	1		"
Kalka-Sanda		ł	1			1 1		i	1	l	1	l	1	•
1 (c) Mourbhanj		1	1			1 1		1	i	ł	1	1	1	ŀ
1 (d) Parlakmedi Light		1	1	.		1 1		1	l	1	1	1	1	i
Powayan Light   1,045   2,046     3,130   3,091   5,308   6,591						1	1	ł	ì	219	1	Į.	1	
## Total 1905 . 2,673,394 2,46,35,824 181,901 11,65,664 853,275 54,35,180 9,679,618 6,71,50,832 20,069 1,655 16,207 1,62,083 18carasas		1	Powayan Light		1,646	2,046			1	3,091		1		
Tespore-Balipara Light		1	Tarakeshwar-Magra Light				126	139			3,585	3,761	1	
2' O' gauge.  Darjecliug-Himalayan			Tespore-Balipara Light						1		740	3,603		٠.
36   Howrsh-Anita Light		1	2' 0" gauge.			1			1		1			l
Howrah-Sheakhala Light	35		· -	•	2	31	1,437	23,900	341	5,095	15,807	1,86,344		
Jorhat	36		1	٠									-1.	٠.
TOTAL 1908 . 3,259,163 2,00,01,505 225,730 15,15,751 975,707 56,31,755 10,080,102 5,73,92,858 29,353 1,61  TOTAL 1908 . 2,573,394 2,46,35,824 181,961 11,65,664 983,275 64,35,180 9,879,818 6,71,50,833 30,669 1,65  IMCREAGE	37		j	•						"				
TOTAL 1905 . 2,673,394 2,46,35,894 161,901 11,65,604 983,275 54,35,180 9,679,618 6,71,60,823 30,689 1,63  INCREASE 43,760 3,59,887 22,433 3,06,005 660,644 1,42,083 36	38		Jorhat	•			*							"
INCREASE 49,769 3,59,887 22,432 3,96,905 680,648 1,42,683 21			TOTAL 1908		3,259,163	2,00,01,505	325,730	15,15,751	975,707	58,31,755	10,660,162	6,72,92,85	5 29,343	1,81
Paratra Sum Marina			Total 1905		2,573,394	2,46,95,821	181,961	11,55,604	953,275	51,35,150	9,979,518	6,71,50,62	30,069	1,62
Degrates 214 201 40 24 210			Inchmass				48,769	3,59,897	22,433	3,96,608	690,641	1,42,083		16
DECEMBE - SLE, 231   40, 36, 319               708		1	DEGREESE		914 001	40.94.010	,			-	<b> </b>		706	

DIX 17—continued.

# earnings therefrom during the calendar year 1906.

and is therefore not the same as the total production.]

			3	Χ				X	r. [	X1	1.				XIII.			
IDES A	ND SKI	NS.							,		1				JUTE.			
CATTL	E	Skins	SHER GO	P AND O	REHT	To	I & Is.	Hore	<b>18.</b>	Hemp () and et fibr exclu-	hor es ding		l) aw.	Oupny clo	2) bags and th.	ŧ To:	F&L.	
(b Ra	) w.	(a) Dresse tunu	d or	(b) Ruw	)					<del></del> 7				<u>_</u>		,		
quantity.	Earvings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings,	Quantity	Karntsøre	Quantity.	Earnings.	Quant. ty.	Earnings,	Quantity.	Earoii gs	Quantity.	Darnings.	Main hand.
		Tons.	Rs.	Tons.	Re.	Tons.	Rs.	Tons.	Rs.	Tons.	Re.	Tons.	Rs.	Tons.	Rg.	Tons.	Rs.	
Tons.						11,491	1,25,541	406	3,292	8,365	54,175	16, 137	57,º≴1	22,620	2,17,245	39,263	2,75,096	
1,659	1,25,541		61	2,890	36,356	4,653	52,80G	173	2,207	2,103	29,039	375	5,810	11,818	76,916	12,193	82,726	
		2,46:	13,318			28,101	1,53,345	362	796	12,033	37,200	820,188	00,37,633	23,435	70,833	853,023	15,60,494	
40,174	6,02,027	425	6,427	- 1	1,91,651	51,923	9,01,471	1 63	0,615	29,016	2,24,536 1,36,290	1,21	9,06,471 13,796	29,986	2,97,248	31,176	3,11,044	
8,989	1,21,431	63	2,089	1	2,32,936	20,745 45,467	3,58,417 4,11,618	1,535 966	20,420 6,120	7,118	60,303	149	1,039	18,161	1,33,679	18,309	1,33,718	
6,305	51,373	3,507	41,936		3,06,036 24,306	3,660	33,865	223	1,736	702	5,515	7,11	137	2,919	21,919	2,330	21,981	
911 16,686	9,543	178	2,137	1	1,90,976	34,372	3,70,305	297	2,399	097	6,140	73	991	53,393	4,43,133	53,463	4,44,437	
6,153	44,864			4,180	18,698	10,333	63,562	643	2,490	16,037	30,422	173	1,097	9,702	48,436	9,871	49,533	
			1			ļ										:5	1	
849	11,291	<b>1</b> .		29	325	577	11,616	7	128	323	1,461	95,439	2,21,098	784	4,654	96,223	2,25,742	
9,939	63,391	17	165	3,349	20,732	19,318	81,328	125	764	6,977	42,15	7,635	39,148	16,799	90,791	24, 134	1,35,962	
		6	26			183	1,227				•	10,772	47,900	125	155	10,~97	48,355	ı
209	1,235	17	190	G24	3,709	851	6,151	5	29	1	5			1,698	8,648	1,098	6,096	i
3,161	34,108	2	23	51	476	3,267	35,175	43	622	7	70	15	243	15,193	63,859	15,208	61,100	!
•••				•••			••		•••						···			
•••					9,151	1,231	14,497	42	 526	111	1,471	3	24	2,637	24,054	2,840	25,478	
381	6,316		15	850 1,000	9,100	1,573	13,699	1	0	197	207	10	51	1,620	17.233	4,630	17,383	
\$70	4,419 107	51	105	1,068	2,265	1,205	2,624	12	31	533	1,583	1	1	705	1,081	705	1,962	ĺ
76 39	126	4	9	60	205	103	340	3	8	11	68			168	450	166	439	
3,737	43,821	10	143	6,563	64,100	10,410	1,12,669	111	1,111	2,839	18,321	កទទ	6,190	16,581	1,12,100	17,089	1,17,599	
893	4,412			469	1,00%	1,362	6,410	65	415	2,014	H,( 68	135	27	2,032	9,644	2,939	9,671 04,711	
4,194	35,230	1,365	21,416	8,715	56,078	15,364	1,27,180	227	1,081	3,715 1,563	29,093 14,265	4	11+3 35	11,510 8,611	63,528 55,694	11,678 8,615	55,910	
1,996	16,627	230	1,184	11,41;	80,321	13,739	99,568 1,455	i	4,364	3	15	1	4	204	935	205	939	l
112	698		1	158	768	208	1,400											Ì
									l								•••	1
***	211	""		 86	236	163	447	5	15	21	57		2	1,123	3,609	1,423	3,611	
77							*											
							·			11	38			41	122	4	122	
 89	420		1	23	200	62	681		0	14	235	1	24	125	1,305	126	1,419	
3	8					3	9	1 .	۳.			1 5	3	137	231 K2	138	234	
305	266					804:	266	1	1	474	266	5	•	40	53	"	,	
•••							72					1,508	1,940			1,508	1,940	
20	72				-	29	'*											
•••	"	-		"	-									1		1		
259	3,811			6	83	265	3,394	7	136		7	1	43	142	1,853	143	1,996	
		•				-												
	-								-									
,	•••								<u></u>									
119,131	14,68,015	8,338	88,646	127,403	12,57,911	284,315	29,97,127	6,640	61,292	101,143	G,04,15f	1,121,670	72,42,064	311,180	25,35,805	1,433,765	97,77,889	
91,527	10,88,12	10,038	1,15,655	111,056	11,10,42	9 248,975	24,27,611	5,021	55,926	92,810	6,08,063	1,027,320	64,59,430	816,315	26,93,974	1,343,695	91,42,404	
27,604	4,85.791			15,837	1,41,486	10,110	5,09,618	1,028	5,466	8,332	98,093	94,255	7,68,654			89,120	0,35,485	
	1	I .	Ł	1	1	-l	.l	_	_	-			·	-				1

# Principal commodities carried by railways and the earnings

[The total quantity of each commodity represents the total weight conveyed over all railways in India

N:	UYBER.				XIV.				xv.			T	<del>, , , , , , , , , , , , , , , , , , , </del>		
								LE.	ATHER.			1			
Main head.	Sub-head.	Railway system, erd. Appendix 38,	_		Lac.	Un	(1) wrought.	bo bo	(2) rought, cepting ots and nuck,		Total.	Ale	(1)	kinds	(2) nes and rits of ad including try spirit
		•		Quantity.	Eattings.	Quantity.	Eartings.	Qrautity.	Karnirgs.	Quantity.	Earnings.	Quantity	Earnings.	Quantity.	Earnings.
		5' 6" gaugo.		Tons,	Re	Tons.	lis,	Tons	<u>-</u>	-	-,		-	-	-
1	(u), (b) & (e	Bergal-Nagpur		7,71:	}		1	1	R 4.	1,230	į	Tons.	1	Tou?	1
2	(a), (c) to	Bombay, Barody and Central India		. 206	1,770	1,16		1	1	1	1 1	1	1		1
3	( f /k (n) & (v). 	Eastern Bengal State		1,278	9,808	١.,						1			
4		Eist Indian			1		1	1	1	1		1	1	1	,
5		Great Indian Pesinaula		720	1	1	1	1	1 1	1	i '	1	1 '	1	,
G	(a) to (d)	Madras		105	1	4,217	1	1			1		1	1	, ,==
8	(a) & (b)	Nizam's Quaranteed state		. 1	1 -	1,233	1	, ,,	1				1		
9	***	North Western State		1,525	25,908	2,717	31,641	1	! '	1		1	1	1	1,000
10		Oudh and Robilkhand State		979	6,500			162	1	1	!	1	1	1 '	,,
1		, 3'31" gauge.		1		1						1			1 ,,,,,,,
11		Assum-Bengal	•	712	7,117			2	3+	2	38	151	1,310	49.	2,004
12		Bengal and North-Western	٠.	1	1	138	461	96	1,113	236	1,57	<b>1</b> 58		30	1
18 14	•••	Bengal-Domes	•	,		"							20	23	258
15	••	Bhavnaga: Gondal-Jucagad-Porba dar . Burna .			i	212	1 '	40		3.2	1,918	2.7	115	15	1,102
16	•••	Veoghur		1,900	1	39	1	56	1,022	0.4	1,584	2,6 6	31,321	н 1	13,412
17		Dibra-Sa liya			"	l					•••		.		
8	(0)	Hyderabad-oodsyari Valley		17	169	19	180	71				69	1		
19		Jodhput-Bikane.		358	1,990	169	i	115	, ,	90		1	1	30	1
c	(e) to (h)	Madrus		I	6	29		10	1	301	!	1	i	57	
10		Morv			15			16	í	10	1	1,73.1	3,432	337	1
2	(b) & (g) to (m).	Rajput ma-Ma'wa		631	6,629	728	7,942	£08	7,102	1,124	į	2,396	17,846	1,503	1
20	(a) & (b)	R. hiikund and Kumaon	_	222	กเร	5			١.		į	1		1,000	20,780
21	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	South Indian		195	1,113	13	100	34 24	209	39	246	1,130	6,236	157	2,308
22	]	Southern Mahratta		63	839	1,053	10,311	65	813	1,139	412	463	2,703	4,009	4
23		Edalpur-Chitor		2	14	11	65	3	42	1,138	11,147	1,671	14,310	2,777	1
- 1	l	2' 6" gauge.		1				_		"		l ""	1	6	67
24		Bainset-Branchat Light										<b> </b>			
25		Bars: fight			2		2	10	46	10	49			10	38
26		Bukhtianjore-Behar Light						*							
27	1	Cutch	•			4	11			4	11				
30		Kalka-Simla	•		1	8	63	21	507	21	630	1,653	11,937	148	3,424
1		Mourbhauj	•	1	3	•••	1				1		1	8	27
20		Powajan Light	•	•••		3	3	•	#P*	2	2	1	3	68	<b>5</b> 3
32		Turakeshwar-Magen Laght			 18	•••		•••		•••		•••			
83		Tespore-Balipara Light			*	•••		***	"	•••	•••	-			
1		2' 0" gauge.	Ī			•••				•••	***	•••		20	126
35		Darjeeling-Himalayan		6	97	•••		6	194	6	194	541	K180		
36		Howrah-Amta Light				,					19-3		5,159	201	6,022
37		llowrah-Sheakhala Light				•••		•••		***					
39		Jorhat					š:	•••			1			•••	,
		Total 1908		42,404	5,63,477	15,533	2,16,543	10,480	1,73,676	25,993	9,90,219	40 521			
	1	Total 1905			5,52,436		1,70,520						4,77,517		5,69,789
.	1								1,91,545	21,170	a,62,065	51,171	5,24,723	41,(81	5,07,385
	1	Тисранна		1 794	11,041	8,697	48,029	1,226		4,823	38,154			4,717	
J		DEGRASE		1,756		•••		•••	17,869	***		1,620	47,206	•••	17,446

DIX 17-continued.

#### therefrom during the calendar year 1906.

and is therefore not the same as the total production.]

XVI.									XVII-	-(contil	n fulkow	eng page)						Number.
 LIQUOB	s.	-								M k	TALS.							
bouor	r soris, or toddy mouted other	To	tal.	(1 Isr: Unwre	3AH.	(2 Bra wrou	AK,	Сор Сор иьжго	per.	(1 Capp Wigt	η: Γ <sub>0</sub>		ı)	} -	(5) ND STE		··· ··· ··· (c)	
than le	ale and er.											( u			ought.		rought.	Main head.
Quantity.	Farmegs.	Quantity.	Earnings.	Quantity.	Earnings.	Prantity.	Ezinings.	Quality.	Earnings.	Quartity.	Barungs.	Grantity.	Lattiogs,	Qunetts.	Estuings.	Quentity.	Karnegs.	
<del>-</del>		<u>ở</u>		- <del>5</del>	- A	·		- <del></del>	<u> </u>	- <del>-</del>	펺	خ 	4	<u>~</u>		- <del>-</del>		
Tons.	Rs,	Tons. 2,395	Rs.	Tons.	н.	Tons. 1,990	R#. 21,690	Tons.	R4.	Tons. 223	R 2,507	Tons. 875	R ., 7,195	Tous.	Rs.	1 on a. 40,353	Rs.	
1,621	9,405	7,514	19,00 <b>9</b> 58,2 <b>6</b> 3	1,3.0	17,291	F86	11,497	 353	4,953	612	8,411	1,382	15,343	591	6,433	25,456	1,55,033 2,83,899	1 2
•••		1,296	17,850	1,281	7,3:5	3,021	21,913	152	47.2	292	1,:90	279	1,109	750	2,133	50,128	2,74,126	3
5-0	4,141	10,331	1,13,786	2,250	20,023	8,241	96,210	102	1,522	787	13,872	8,783	£0,1¬5	61,960	1,33,486	74,200	8,52,021	4 -
27	111	i	2,31,704	3,078	(1,819	2,323	42,197	859	17,492	1,201	20,117	2,815	47,573	4,220 1,610	53, 192	04,603	10,93,925	4
5,270 1,001	30,511 8,216	16,413 4,383	1,20,791 32,508	247 233	2,529 1,917	1,848	19,103	72 332	760 2,059	406	613 613	● 808 125	4,122 , 1,219 <sup>¶</sup>		16,2+6 19,1e6	2,5%	1,52,742	6 8
549	8,038		2,29,407	CCD	10,234	2,210	31,168	418	5,669	600	10,751	2,134	50,392		37,100	£1,018	8,25,569	9
		7,157	49,151	<b>1</b> 00	573	3,194	19,700	3	30	229	J,506	953	5,023	17	111	18,941	75,310	10
		641	4,223		2	210 ¦	1,927			3	31	16	83	1	11	4,185	27,732	u
•••		359	8,761	195	1,593	1,822	13,702	6	66	87	623	1,030	8,072	5°8	2,641	9,1.8	69,593	12
•••		27	278	٠`	1	11	60			1	2					1,267	12,358	13
•••		176	1,847	307	913	272	1,552	122	612	33	573	306	1,259	215	526	1,4::7	8,212	14
23	530	3,439	45,563	46	424	218	3,190	38	245	35	490	7:6	1,519	417	2,034	7,691	ħ2,120	15
•••		69	 1,048				. !	.						•••			···	10
055	3,456	711	3,990	28	223	180	2,398	2	23	19	210	1,395	1,106	617	8,344	2,336	25,293	17 8
27	162	107	1,996	19	F6	160	1,418	1	17	125	674	1,095	13,561	152	702	2,530	17,773	18
48	299	1,521	6,829	2	13	37	170	н	68	31	222	65	614	18	1.18	992	5,203	6
24	93	30	106	2	8	21	' qe i	~-	3	1	15	12	41	••		:50	094	19
212	2,730	4,027	43,119	1,330	26,613	2,005	20,198	394	8,143	371	5,162	703	6,509	1,(4)	6,761	18,324	1,81,341	2
1	5	1,327	8,609	91	451	468	2,755	4	27	4),	280	68	224	126	553	4,041	20,156	29
523 <b>6</b> 423	1,847	4,082 12,671	32,780 76,526	877 150	6,522 1,760	967	9,501	65 68	451 1,0-6	106 <b>4</b> .33	1,711	939	16,221	2,121 5,153	13,007	7,530	60,055	21
		6	59			9	(4)	2	8	*	33	752 7	5,315 29	16	26,660 260	6,588 134	55,706 1,275	22 <sub>.</sub> 23
•••																	<b></b> .	26
•••		10	38	3	10	49	153	2	6	83	104	2	7	3	0	1,(5)	2,726	25
•••							•••			···								26
		 مفاهر				5	17	•••		4	14							27
21	515	*	15,900	3	31	26	456	3	19	38	1.63	227	8,061	257	3,500	. 464	7,516	30
	"	69	29 54			13	35					11	16 17			119	406 101	1
						'	"					197	462					1 20
						98	68	•••						4	8			32
		20	126				•	26	162					٠.			,	. 38
		742	11,191			83	745	•••		8	208	38	916	3	57	504	11,257	* 95
																		36
••• 62	- '																	37
'*								*	-"	<u> </u>			 		<u> </u>	<u></u>		58
19,867	111,991	115,216	11,59,297	12,630	1,63,734	81,641	1,85,747	2,050	44,24:6	6,120	79,099	28,310	2,91,949	87,710	1,05,931	110,077	42,70,919	
14,661	67,294	100,913	11,79,252	13,401	3,00,254	30,808	7, 42,1 44	4,552	70,150	8,008	109,5 14	37,438	3,40,205	80,416	1,27,180	330,860	31,93,404	
5,206	44,697	8,303	<b></b>			F33										73,217	7,77,585	
-	- ,,,,		19,965	771	36,520		0,397	1,603	25,900	1,686	28,546	9,089		8,627	91,458			

## Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight convoyed over all railways in India

<u> </u>				<del></del>	X	V11.	····		<u> </u>				χV	111.	······································	
N	CUPES.				METALS-	-concluded.						•	Oil	lu.		
-							<u> </u>					1		-		
			Iron:	(5) ભાગ કાલ્લો		4. 1			•					40.		
		Raitway system, tide Appendix 38.	- 001	icluded.	1	(6 l N: T4.	т	otal.	•	(1) osine.	r	stor.		(3) unut.	1	(1)
			Vann	(4)	l '''	4114.			,,,,	onthe,	`"		Coes	unut.		rdond ipo.
			artiin	inctures.						ı						}
-				1	1	Ì.		1		١.						
, bea	Sab-head.		100	i,	1.5	1 5m	June.	(f)	1 1	EarLinus	1 5	Eartimes	Quartity.	8,30	it.	100
Main bend.	450		Quanti.3	E. 11 15 4	Q <sub>H</sub>	Erri	-F-0	Eumaings.	Quantity	Ear.	Quentra	Eart	Cum	Earm bgs.	Qu.ntity.	Earnings.
			- <u>-</u> -									·				
		5' 0" gauge.	Tore.	R4.	Tons.	65.	Tons.	Re-	Tons.	Rs.	Toue.	Re.	Tous.	Ra.	Tons.	Ra.
1	(a),(b)	Bengal-Nagpur	3,664	00,-03	137,722	0,85,765	471,850	9,44,952	29,821	2,92,343	2,826	23,50 1	1,125	8,360		
2	(a),(e) to (f) &	Pombny, Barola and Centra, In-	27,411	3,96,759	00,411	2,70,966	i   114,445   	10,18,556	19,637	208,783	1,673	17,175	657	8,679	883	8,031
	(n) & ()	Padam Da - No.		!	1						!	i	İ			
3		East Indian	7,733	39,627	10,571	37,339	74,310	3,85,5-3	119,649	34°,875	145	875	1,1:9	1	8,100	59,197
4		Great Indian Peninsula	25,133	3,80,329	26,6 0	22,25,422	193,711	17,11,645	89,963	7,51,902		20,423 1",494	2,370	21,098	10,672	1 26,241
6	 (a) to(d)	Madras	20,221		2,511	23,640	10,590	3,57,170	39,142	8,43,118 2,83 4 10	3, 313	12,364	4,148	49,019 35,551	21	119
8	(a) to(a) (a)&(b)	Nizma's Guaranteed State	16,831	1,54,497	549	6,717	7,521	71,770	5,652	46,200	32)	2,231	1/9	1,752	1	170 26
D		North Western State	17,001	2,74,225	5,179	05,316	H3,952	13,20,516	29,566	<b>5,</b> 86,559	CIL	7,697	1,345	i	2,417	27,194
10		Oudh and Robitkhand State	1,-17	27,0()	17	5,517	25,42	1	19,719	92,118	1:3	698	12	355	511	3,990
	+	3' 3\" gauge.		1			1	ĺ	l			1	1	1		-,
11		Assum-Bengal	1,120	11,750	1,200	15,313	7,212	50,910	13, \$11	43,467	35	339	62	879	1,099	10,0.7
12		Bengal and North-Western .	6,777	45,418	3,107	25,683	22,710	1,51,604	23,875	1,03,729	375	2,520	201	1,635	1,143	10,480
13		Hengal-Dooars	75	912	101	6,679	1,759	19,941	1,835	6,770			30	111	272	1,241
14		Bhavnagar-Gondal-Junaged-Por- bundar,	634	4,5 1	268	1,291	3,9 20	20,169	4,022	15,901	192	751	74	420	76	161
15		Barma	9,2.9	1,01,552	279	3,379	14,610	1,68,272	9,767	63,297	170	1,070	7 17	8,569	23	310
16		Deoghur		***												
17		Dib'u-Sadiya			1,157	9,250	5,5 12	43,274	7,535	20,640						
8	(c)	Hyderabad Godarari Valley	908	10,508	201	3 800	4,685	5),011	2,365	22,031	111	1,009	138	1,198		3
18		Jedhpur-Bikaner	:01	2,483	512	1,113	1,585	37,531	2,681	19 801	22;	1,892	47	300	Б	62
6	(a) to	Madras	390	2,236	82	733	1,625	9,417	2,934	10,101	22	7-5	572	1,278		l
19	(A) 	Morvi	37	150	16	60	:51	1,079	269	837	13	28	0	19	5	14
2	(4) &	Rajputapor-Madwa	6,587	80,005	53,056	1,11,651	83,990	4,53,25)	11,5:00	19,178	884	5,802	252	3,700	501	3,002
	(g) to (m)				l			1								*
20	(a) & (b)	Robikund and Kumum	368	1,671	205	1,519	5,472	29,036	203,5	7,441	34	145	9,	84	108	613
21		Sooth Ludian	6,181	81,043	1,891	12,114	23,313	2,01,021	27,113	1,59,067	3,660	24,308	1,773	7,603	71	371
22		Southern Mal milts	4,730	61,969	45,023	2 97,919	67,178	1,16,506	24,657	1,91,687	937	7,083	1,738	10,603		
23		Ud apar-Chitor	12	71	52	361	372	2,120	257	1,284	2	15	5	29		
l	1	2'6" gauge.							`					1		
25		Bar 1901-Basirhat Light														
25		Bacsi Light	204	<b>418</b>	26	100	1,373	3,931	5 15	1,205	6	17	104	1	•••	
26		Bukhtiarpore-Behar Light					 \$100									
27		Cutch Kalka Simba	129		1	1.400	139	377	113	369 7 191			16	44	2	1
30	···	Kalka-Simla Mourbhanj	205 · 25	3,278 67	55 6	1,400 21	1,271	20,722 515	47	7,191 65	6	53 11	2	8	6 8	90 12
1	(r) (d)	Parlakimedi Light	5.		10	16	110	143	328	203	7	5	2	2	l°	"
20	(0)	Poweyan Light	`		"	'"	197	402				`				
83		Tarakeshwar-Magra Light	10	 23	."	,	121	129				***			173	236
33		Tezpore-Balipara Light					26	162								
		2' 0" gauge,			l				1							. L
36		Darjeeling-Himalayan	450	10,430	146	2,816	1,217	26,439	772	10,030	3.	65	6	133	374	4,966
36		Howrsh-Amta Laght														
37	44-	Howrah-Sheakhala Light								•••		<b>i</b>			***	
38		Jorhat		~-								•	`		•••	
- 1	4	Total 1908	167,175	21,47,60B	923,601	30,75,51	1,670,512	1,18,48,873	586,217	42,70,019	20,064	1,48,554	19,71%	1,91,731	26,67	:,43,873
		TOTAL 1875	120,200	17,07,390	512,001	23,75,939	1,108,272	89,65,505	587,326	37,53,129	19,79%	1,41,070	30,629	2,0 <b>4,</b> 460	21,041	1.87,769
		increase	37,877	4,40,418	411,000	16,00,601	<b>5</b> 01,740	20,53,268	48,891	8,17,890	273	7,486			8,032	50,108
`. I		Древиля —		***	***					.,		***	911	12,738		
7				أحبسين							-				-	

# DIX 17—continued.

## the earnings therefrom during the calendar year 1906.

and is therefore not the same as the total production.]

Section   Sect	1 #	<del></del>				~).	owing pag	l on full	continue	XIX (				·····					
Color   Colo	Menses						***********	L-SEEDS.	0										
Tome,   R.A.   Yone,   R.S.   Tome			í		ł	land .	Rape	- 1						1		al.	Tot		1
Tomp.   R.A.   Tomp	Maiu bead.	Earnings.	Quantity.	Earnings.	Quantity.	Earning4	Quantity	Earnings.	Quantity.	Eamings.		Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earninge.	Quantity.
Ref.   20.272   20.203   27.007   27.007   27.007   2.420	1	Rs,					,	l			Fons.				Tous.		ľ	1	1
11   10   10   10   10   10   10   10	2				30,964	1, 5,004	19,668	j	13,168	53,891		i	,		27,606	2,70,547	20,332		
11,100   1,207,700   15,74,700   15,74,700   16,74,700   16,74,700   16,94,100   17,04,1	3 4	 2,96,171		•	- 1			- 1		1		1			1		1		1
Color   Colo	-	17,25,115	171,038	11,96,187	106,907	2,97,768	13 🔑 8	2,16,115	18,851	11,01,350	04,595	18,032	8,829	1,92,528	<b>30,</b> 631	15,73,750	77,799	1,23,726	11,125
1.11	1	27,303 6,24,017		89,134	12,311	5,03,861	61,2.1	1,361	721	9,710	1,219	3,410	201	1,536	177	A,9-,977	20,657	61,463	5,665
336 2,700 25,703 1,21,104 10,000 22,419 58 C16 75,024 1,05,677 0,500 74,0 U 15,413 5,71,700 791 4,301	10						,								·				1
9,6% 85,611 20,485 1,78,785 15 172 3,914 33,916 13 102 3 6.4 5 37 7,707 48,799	11 12 13			4,391	791	2,31,708	15,413	34,630	<b>6,</b> 560	3,08,607	75,021	r(16	38 <sup>!</sup>	23,419	10,090	1,21,104	25,938	2,760	336
	14												1						1
5:26       6,733       3,770       27,148        3       23       133        1       0       20       7,189       22,710       5,079       21,600           3       9       16       915       1,31           3       9       16       915       1,31            3       9       16       915       1,31             3       9       16       915       1,31 <td>16</td> <td></td> <td>***</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>  </td> <td></td> <td></td> <td></td> <td></td> <td> </td>	16		***																
71	9 8	1,43,698							}			132	23	3		27,548	ļ	İ	1
103 1,082 2,765 0,439 4,114 11,890 35 241 1,225 2,681 6,224 7,654 5,660 21,625 1,211 3,165  10,894 63,111 40,320 2,54,400 5,551 31,400 104,516 2,00,650 4 10 46 310 1,139 6,028 23,670 1,40,826  4,132 20,897 36,384 2,20,244 4,513 22,215 4,473 22,084 4,047 43,121 4.0 4,015 517 3,561 16,437 1,21,214 17,550 82, 0 47 270 1,374 9 75 78 200 531 1,686	6 19	8,296	2,229	723	608	6	3	5	3			11	3	12	5	631	301	233	71
4,132       20,887       36,364       2,20,240       4,643       22,215       4,473       22,064       4,042       43,121       446       4,015       617       3,561       16,437       1,21,214       17,530       82,602	20	1					•												
302 1,102 1,047 2,727 157 351 1,333 3,081 9,031 24,502 16 45 14 36 1,236 2,610 4,272 9,	9 22	82,719	1					1 1		1	_		Į.	1	ŀ	1	1	1	•
	23			2,709	មភថ			1,686	<b>631</b>	200	78	75	9			1,374	270	47	0
68     100     188     577       24     64        10     55     41     123         29     493     093     7,548     5     7          2     2     2     21     42       5     5     65     116     1     2	24 25 26	0,101	ı	1	j					1			l	1		1	1,047	1	1
7 7 344 217 7 6	27	480		133	41	55	19		**		-	64	21			577		160	58
173 296	1	1	1	1	i	19	20		1	ļ	1	İ	l	1	•	1	ı	i	4
104 14782 1,259 17,808 1 10 7	20 32 33					169	135									236	173	1	-
	35																		
	37																		-
83,885 6,29,782 736,527 54,84,676 227,803 11,06,671 130,805 4,09,501 300,070 27,61,806 116,384 8,09,480 308,512 27,89,783 3:6,507 27,85,533 383,078 20,15,	1	29,15,435	-	27,88,592	8:0,507	27,89,733	368,512	8,08,4RO	116,384	27,61,800	300,070	4,09,501	130,805	11,00,671	227,503	54,64,676	736,527	6,29,702	
50,758 4,79,398 28,088 1,65,909 5,900 38,682 7. 19,686 86,299 11,392 2,65,495 47,671 3,74,674 3,951		29,41,904	3,951	3,74,671	47,671	2,65,495	11,392	94,299	19,656	Ý.,		30,582	5,900	1,55,909	78,088	4,79,898	50,758		

APPEN

#### Principal commodities carried by railways and

The total quantity of each commodity represents the total weight conveyed over all railways.

Nos	41188			XIX		1		1		1				XXI
-		•		OII-8BF D9	~coseld.		XX.		XXI					PRO
		Ratiway nystem, <i>vols</i> Appendix 38,	(9) Othe	rs.	Tota	ι.	Oplun	n.	Paper : postebo	und pard.	(1) Dried fru nute		(2) Ghe	
FREE DOSE	8ub-head.		Prantity.	Eard.nex.	Quantity.	Earnings.	Quantity.	Earnings.	Quant.:3.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5' 6" gaugo.	Tons.	Rs.	Tous,	Rs.	Tons.	Me,	Tons.	Rs.	Tons.	Es.	Tons,	Hs.
1	(a), (b) &	Bengal-Nagpur	11,631	52,837	:0,236	4,61,388	G1	1,713	936	16,410	11,150	89,684	3,318	41,62
3 (	(*). [a], (c) to (f) & (n) & (o).	Bombay, Baroda and Central Inita.	r,197	45,756	104,702	8,17,119	2,529	62,618	8,792	94,698	14,595	1,51,079	8,333	88,20
3	a (0).	Eastern Bengal State	2,051	10,182	34,953	1,37,361	8	เวช	6,428	8,760	1,413	2,817	734	5, \$1
4		East Indian	E,534	20,943		28,50,260	8,900	2,19,031	10,350	1,75,662	0,859	88,206	17,072	3,80,8
5		Great Indian Pouinsula	12, 07	08,390	107,717	19, 19,509	459	29,968	3,114	60,475	38,376	6,00,049	11,668	1,55,6
6	(a) to (d)	Madias ,	40,493	2,78,671	120,611	5,65,551	52	1,569	1,206	16,918	8,440	46,822	6,058	52,9
8	(a) & (b)	Nizam's Gunranterd State .	2,753	8,677	58, IG5	4,67,007	22	809	700	7,626	0,683	75,818	816	11,3
0		North Western State	125,693	15,96,901	302,945	24,37,206	72	810	3,850	69,201	29,080	4,97,309	11,392	1,27,2
LO	۰	Oudh and Robilkhand State . 3'31" gauge.	20,525	81,266	67,881	2,72,003	1,834	40,966	3,082	22,128	1,492	12,396	2,508	15,9
"	*	Assam-Bengul	и	41	2,654	12,313	3	37	93	673	106	3,637	246	2,3
13	•••	Bengal and North-Western .	6,158	25,317	144,655	6,31,785	6,391	1,03,530	3,452	8,323	1,284	16,629	3,933	36,0
14		Bengal-Dooars	14,519	1° 56, 184	678 90 25,151	3,045 26,136	 18	181	19 262	57 1,440	3 2,526	10,662	22 1,570	10,
15		Burma	417	2,992	12,192	F6,111	26	471	711	11,172	1,422	11,314	908	14,0
le	•••	Deoghur											<b>.</b>	•••
17		Dibu-Sadya					}				976	6,597		
8	(0)	Hyderabad-Godavari Valley .	1,181	28,622,	56, 168	3,76,015	13	673	237	2,850	2,695	29,719	620	6,0
18		Jodhpur-Bikaner	34,933	1,23,037	47,230	1,70,009	29	458	93	710	2,479	11,207	6,282	63,7
8	(e) to (h)	Mndins	1,050	5,028	3,241	7,374		1	26	127	49	170	190	7
10	 (b) & (g) lo (m).	Morvi	244 7,370	467 38,245	3,691	4,510 5,78,521	7 2,300	17 36,561	15 2,722	171 64,293	19,205	240 1,48,053	55 10,278	1,20,
20	(a) & (b)	Bohilkund and Kumaon	42	112	17,461	47,007	ena .	12,121	83	482	387	2,107	208	3,0
21		South Indian	2,758	13,614	137,531	3,93,072		1	2,101	39,088	570	4,311	1,494	11,
22		Southern Mahratta	7,095	38,177	63,169	<b>3,37,97</b> 6	2	42	668	8,552	29,421	2,07,184	4,425	35,
23		Udaipur-Chitor	5	12	1,370	4,142	63	304	45	351	437	2,232	380	2,
24	•••	Baraset-Rusirhat Light			14.000	42.450		•••	···	104		, 1 063		"
25 26	•••	Barni Light. Bukhtiarpore-Behar Light	1,339	3,161	18,005	43,176	***		47	101	800	1,982		
27		Cutch	40	110	127	362				10	188	561		
30		Kalka-Simla	. 11	150	67	753			300	8,342	84	1,407	49	
1	(v)	Mourbhanj	309	584	313	<b>4</b> 61		•••	22	49	2	6	17	
1	(4)	Parlaklmedi Light	107	91	292	.∓ 217		•••	ه	4	۱ ع	1	1	
20	(c)	Pownyan Light		,	303	480						•••	\	
32		Tarakeshwar-Magra Light	·		135	109			8	18	•••		20	
:		Tespore-Balipara Light .	. 11	82	11	82				•••		•••	21	,
	1	2' 0" gauge. Darjeeling-Humalayau	1					6		2,708	36	715	21	
86 36	ţ.,	Howrnb-Amta Light .	1 "	•••	•••	19	•••		101	1			*1	
37		Howrah-Sheakhala Light .	] "						<u> </u>					
86		Jorhat			۱ 📜		i		<u> </u>					
		Total 1906	310,555	· ;	2,290,314	1,61,13,976	28,361	5,03,638		6,00,500	179,083	20,24,089	92,100	11,78,
		To7al 1905	279,018	20,08,923	2,169,710	1,63,86,564	22,884	4,72,179	42,094	5,00,688	183,666	20,57,516	93,904	11,91,
	İ	MBANNORI	. \$0,637	5,49,688	120,598	7,57,424	497	31,367	7,460	80,813				
	1	DECREASE					T		-		4,583	\$5,477	1,795	12,

# DIX 17—continued.

# the earnings therefrom during the calender year 1906.

in India and is therefore not the same as the total production ]

<del></del>														· <del></del>		xx	tv.	,
OX6.						PLANT AN	D WOLLIS	G-stoce	CARRIED	POR THE		AND TO	BIGN BA	ILWAYS.		<del></del>		
(8 Othe		To	otal.	Locome engin tender parts th	es and	Carring	nd barts	Strel r	a) uils and pates,	Sieepers	and keys	Oth	o) 018.	Tot	a).	Ba	lt.	
Ė		ity.	284	jį.	- S80	ity.	ngs.	it.	, p. 1.0	<u></u>	 89	<u>.</u>		<u>.</u>	.53	<u>s</u>	E.	•
Quantity	Earnings	Quantity.	Earninge	Quantity	Earnings.	Quantity.	Earnings.	Quantity	Earninge	Quantity.	Earnings	Quantity.	Earnings.	Quantity.	Earnings.	Quantity	Barnings.	
Tons.	Be.	Tons.	Rs.	Tons.	Ru.	Tons.	e Rs.	Tone.	Ra.	Tons.	Rs.	Tons.	Ro.	Toue.	Rs.	Tons.	Be.	
6,387	74,421	10,855	2,07,626	377	3,646	839	2,235	3,549	14,324	46	368		4,49,330	- 1	1,69,063	107,146	6,78,693	
24,946	1,57,250	47,874	3,98,620	. 195	1,054	<b>54</b> 0	3,443	43,368	1,85,187	3,026	13,463	63,240	2 <b>,24</b> ,810	109,369	1,27,916	301,465	6,91,959	
8,329	62,218	10,478	<b>6</b> ∩,478	200	1,220			191	563	93	90	19,175	35,076	19,081	36,938	85,526	4,41,107	
79,631	8,27,840	103,582	12,96,905	2,253 9a	81,122	1,664	15,861	1,412	8,294 2,43,071	318	3,468	i	5,61,913	- 1	6.00,677	244,430	12,00,786	
46,609 108,434	4,59,395 7,65,681	90,652	12,15,035 8,07,439	6	117	5	244	1,190	9,532	101	1,32,353 24 <b>5</b>	10,081 051	67,664 4,617	53,327 2,259	4,04,969 1 s,955	221,103	21,30,470	
6,117	29,470	15,626	1,15,420					22	177				".	22	177	83,053	5,1,5,035 1,68,348	
11,408	1,80,574	61,840	8,14,237	1	7	193	312	49	784	682	1,500	80,419	2,69,652		2,65,255	183,413	9,36,414	
683	7,310	4,88	35,647					•••				3,071	8,523	3,071	0,523	57,291	2,75,948	
4,478	36,765	5,132	42,771					893	9,623			226	865	618	4,108	23,491	86,595	
13,326	59,570	18,443	1,11,264	. 6	64	104	103					190	245	312	413	110,785	4,50,848	
865	4,201	910	4,263				·	27	12			208	478	235	490	4,332	12,482	
5,730	28,450	9,626	<b>4</b> 9,923	147	305			1	5		•••	8	15	150	325	8,331	8,610	
40,046	8,59,742	42,376	3,84,577					818	2,3'3			6	3	854	2,256	20,725	2,11,345	
•••	•••					•••	•••	•••			<i></i>							
3,981	17,587	978 7,196	8,597 54,000								•••	•••	··· .			919	4,091 93,268	
1,900	10,154	10,080	75,147	548	1,436			509	1,276	10:	210	3,524	10,510	4,689	13,470	24,159	1,16,685	
6,218	21,271	6,457	22,108	1	8		•••	32	325		<i>.</i>	92	392	125	725	4,791	8,093	ì
379	1,032	517	1,471	•••		•••		1,118	970	67	32	13	8	1,188	1,010	774	3,434	l
14,282	1,00,999	37,765	3,60,372	218	1,5/3	99	423	28,914	1,28,458	692	2.343	160,016	1,59,016	1,79,908	2,91,743	276,316	26,35,292	
656	5,459	1,251	8,054	3	35	26	₹ 55	35	52	3,494	9,316	. 322	1,163	3,890	10,651	30,683	10,310	İ
28,126	1,74,990	30,192	1,90,60	99	63		2	13	70	3	6	88%	2, 20	• 943	2,56	81,762	3,11,068	
19,695 905	1,35,264 3,865	53,541 1,729	3,77,576 8,359	3	10 1	791	4,830	6,711	51,691	717	2,503	7,280	14,537	15,632	1,03,684	57,817	4,66,261	ĺ
<b>9</b> .0	3,803	1,,,	0,000	•	•	•••		٠. ا	'	"	•-	3	9	5	13	1,520	6,918	ļ
•••													<b></b>					ĺ
82	287	939	2,465						***			3				3,920	9,311	
•••			*** EØ4			***	"		"		-	"	"			•••	•••	ĺ
3,576	26,417	3,708	28,452													 1,014	9,853	ĺ
67	124	66	172					27	113			16	87	43	170	879	1,581	
36	33	39	85							1	1	2	٠,	3	3	527	240	
***	¥															288	361	ı
•••		20	143					<b></b>		68	 537				 587	134	114	j
	1	-		"		"	"		"	<b>V</b> .3		-		"	001	·	"	
2,244	83,480	2,300	34,462	-											- 1	1,330	18,651	ļ,
***	-				-				***			-						l
***			***	l	-	-		-		-	-				""		***	l
487,841	85,79,809	707,883	67,82,539	4,143	31,476	4,427	28,0b1	111,218	6,60,776	20,646	166,594	-	19,44,49	679,390	27,21,922	1,843,188	1,13,78,754	
435,171	\$5,42,660	701,681	67,91,496	4,877	26,825	8,638	17,068	97,486	6,45,874	29,251	1,66,288	-	21,89,21	·	-	1,738,046		
					-	<u> </u>	-	-	·	-	-	-	-		-			
19,930	37,140	5,853	***	,,,	4,651	789	11,513	13,757	1,05,40	395	856					105,003	6,64,972	
***	_		8,907	734								60,884			3,22,796	1		1

15

### Principal commodities carried by railways and

(The total quantity of each commodity represents the total weight conveyed over all ratiways in India

Nu	MBB.				ХX	v.			_				xx	VI.				-
Ī			PALT	PETER A	MD OTHE	E FALINE	HC BSTA	NCES.					Sig	z.				
		Railway system, vide	(1	,	(°	2)				Bu.	1) w.			() Picce	goods.			•
-		Appendix 34.	Saltp	etro.	Other	ances.	Ton	TAL.	Fore	1	(E Indi	- 1	Fore	- 1	(6 Indi	1	Tot	al.
Mein head.	Sab-bead.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Karning≪.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Sarnings.	Quantity.	Earnings.	Quantity.	Earnings,
-		5' 6" gauge.	Tons.	Ka.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rø.
1	(a), (b)	Bengal-Nagpur						<i></i>			509	ห,439					509	8,430
	& 'e) (n), (e) to (f)	Bombay, Baroda and Central India.	2,152	17,912	1,520	19,820	3,672	30,702	262	8,034	95	2,317	50	1,570	74	1,769	481	11,720
3	الله (۳) الله (۳).	Eastern Pengal State .	112	_							904							
•	<i></i>	Fast Indian	22,092	365 3,49,814	3,272 23,581	1,69,3.0	3,344	10,504 1,1~,834			384 5/19	3,612 7,467			 10 <b>4</b>	4,629	381 793	3,612 12,490
5	]	Great Indian Peninshis	1,052	10,112	4,417	49,639	5,160	59,781	137	7,981	98	6,543	10	415	7	281	252	9,220
	(a)to( <b>ð</b> `	Madras	599	6,030	1	15	500	6,045	31	277	161	8,475	340	3,218	32	363	567	7,333
8	(a) & (b	Nisam's Guaranteed State.	151	100	1,429	8,648	1,350	9,522					-	5		6		11
	'	North Western State .	6,≃56	29,931	6,157	60,491	12,713	90,332	209	3,375	214	5,553	21	503	29	937	473	10,458
		Oudh and Robilkhand State.	1,017	4,050	223	975	1,270	5,031		•••					29	30	2	30
١		3' 31" gauge.							Ì									
1		Авчаца-Bengal		١			,				20	234					20	234
2		Bengal and North-West	12,644	18,172	7,315	125	19,0.9	78,597			7	50			3	44	10	94
8		Brugal-Dooars	1						l		1							
		Bhaynagar-Gondal	62	260	84	38.)	85	398	9		2	 12	•••			••• ,		
١.		Junagad Porbandar.	" ا	282	11		73	330	ı "	30	•	12		•••		1	11	49
5		Burma	9	146	81	1,390	Đυ	1,538	32	913	11	381	4	86	1	7	49	1,390
1	***	Decghur				~	•••			•••		•••		•••	•••			
7 8	(0)	Dibru-Sadiya Hyderabad-Godavari	 66	719	174	1,371	 240	2,000	···	 76	2	37		 1		 118	 11	233
		Valley. Jodhpur-Bikaner .	372	1,919	1,400	6,827	1,772	8,737	18	62	3	18	<i></i>	Đ	3	31	21	115
6	(e)to(h)	Madras	69	444			59	411			20	66		•••			20	66
		Morvi	3	14		·	3	14		:								
- 1	(b)&(q) to (m).	Bejputana-Malwa .	7,088	61,006	2,000	15,710	9,945	76,716	186	9,141	17	906	50	2,230	40	1,706	293	13,986
10	(a) & (b)	Rohilkund and Kumaoi South Indian	151	353	1,006	2,851	1,157	3,201						•••		•••		
1	•••	Southern Mahratta	435	2,383	8	103	443	2,486	1	28	10	176	13	159	. 21	159	45	622
3		Udaipur-Chitor	279 54	2,2:4	277	2 007	89	4,271	1 10	2,693	211	1,924	1	8	" 1		352	4,624
1		2' 6" gauge.	"	2-8	35	220	."	604		***	"			***	•	•	•	·
13		Barnset-Bashhat Light			ė										e			
16		Barei Light		i .	51	130	54	150	2	10				***			2	10
16		Bukhtiarpore Behar Light.												•••				
17		Cutch	4	10				10					<b></b>					
0		Kalka-Sumia	1	12	2	40	3	52	2	28	ه "	63						111
1	(0)	Mourbbanj																
1	(4)	Parlakimedi Light .	'												_		*	
0	<b>(</b> 0)	Powayau Light .			,					·				***		***		
3	•••	Tarakeshwar-Magra . Light			7	10	7	10			2	6				•••	2	•
3	 #	Tozpore-Balipara Ligh					•			•••		***		•••		•••	***	
5		2' 0" gauge. Darjeeling-Himalayan	1		1				l									
		Howrsh-Amta Light .		-		"	•••	•••		•••	-	•••	"			***		
7		Howrah-Sheakbala Light	•												**			
18		Jorhat										<b></b>						
1		Total 1906																
Ì		TOTAL 1905 .	65,888	4,37,226		3,79,147	100,007	8,16,373	1,008	24,656	2,369	41,727	190	8,264	362	10,116	4,503	95,21
1		Інсаныя .	6,314	3,77,816 59,410	2,311	3,79,043	00,097 0,625	7,57,469 56,874	1,174	28,978	2,732	46,029	299	8,687	80	11,620	2,900	90,21
1		DECERASE .	0,314			538			141	4,323	363	4,301		· 493		1,404	155	10,450
- [			l "	***		""	600	""	^**		""				ļ. <del>"</del>			

DIX 17-continued.

the earnings therefrom during the calendar year 1906.

and is therefore not the same as the total production,]

						X	XVII.				ga . 5 a ·	<b>.</b>	** ****	XX	VIII.
		-				81	rice.								
						1	•							1	
	l) l-nuts.	(: Carda:	2) moms.	(S Chii		1	4) iger,	ł	5) per.	ì	6) # hers.	То	tal.	Stone o	nd lime.
		şi.	jų.	'n	ų.		, si			٠.	,	, i			,
Quantity	Earnings.	Quantity	Earnings	Quantity.	Earnings.	Quanty.	Earnings.	Quantity	Earnings.	Quantity.	Laronngs.	Quantity	Earoing 8.	Quantity	Earaings.
Cons.	Rs.	Tous.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Ra,	Tons.	Rs.	Tons.	Re.
7,081	59,759	•••	,	10,773	1,20,240					7,115	52,257	21,972	2,31,236	79,739	2,24,159
1,108	20,071	95	1,471	2,930	23,851	1,796	9,003	750	15,696	8,654	92,061	15,773	1,62,740	69,527	1,67,526
17,486	1,45,037	292	6,122	5,796	39,437	1,133	10,833	234	4.306	3,811	19,533	29,783	2,83,367	40,972	50,477
8,724	1,74,973	590	14,131	9,051	1,51,825	1,470	14,035	1,626	48,005	11,319	1,63,221	32,810	5 46,210	437,290	14,00,014
10,291	2,33,274	73	1,842	0,331	91,692	375	7,407	361	12,603	11,064	1,46,751	31,495,	4,02,510	1.39,314	4,79,861
11,223	1,35,791	48	531	23,873	1,51,826	720	5,777	e,525	43,451	3,168	17,691	45,671	9,54,907	75,470	1,67,797
857	8,846	11	165	2,701	21,8:6	35	353	41	427	1,461	12,287	6,106	43,894	19,758	59,023
<b>5</b> 06	5,316	269	4,833	8,116	84,460	1,427	14,135	1,213	27,373	5,087	49,892	16,617	1,85,017	2 143 202	4,21,840
1,669	22,958	31	396	1,672	15,207	ອນ <b>ອ</b> ິ	3,443	86	868	1,521	0,259	5,379	49,761	8+,758	1,43,611
1,931	22,627	***	,	2,026	15,490	2	11	5	49	157	1,549	6,121	39,785	18,847	4 ,612
2,442	20,476	540	2,479	8,901	34,534	1,353	12,303	5/13	6,323	3,113	23,028	13,682	98,111	1	67,809
498	2,232	38	368	12	30	74	103	31	163	59	249	714	8,1 15	371	2,313
479	2,360	5	40	511	2,742	10	hs	10	76	1,142	3,182	2,193	8,144	88,970	82,536
5,975	67,955	5	225	5,890	05,209	995	10,114	33	781	168		13,075	1,60,518	i	2,63,695
•••		***					•••							3,033	
674	6,040		19	629	6,847	29	263	11	115	442	4,501	1,460	18,201	1	6,144
111	853	6	48	869	7,074	21	189	35	206	361	1,701	1,126	10,134	29,273	
1,841	3,950	6	16	2,786	10,362	42	131	176	297	87	234	4,937	15,029	1	1 .
8	36		1	69	247	4	11	1	3	62	266	143	004	8,023	6,058
743	10,165	101	2,355	4,289	38,133	455	9,095	504	17,862	9,825	92,299	16,007	1,69,907	85,442	3,07,137
250	2,001	27	190	632	3,676	1"5	679	29	231	841	2,236	1,614	9,000	0,530	16,527
14,404	72,185	546	4,925	8,525	85,633	564	2,005	784	6,515	454	2,100	25,277	1,74,953	2,15,599	2,15,510
10,970	88,490	168	2,761	15,612	19,000	290	2,610	408	3,582	0,991	61,761	37,3' 9	2,59,139	52,241	1,01,400
5	28		2	35	212	15	112	3	25	112	401	170	810	113	482
		.8													
518	1,425		1	10	34	8	21	9	24	182	467	727	1,975	205	407
•••		۳.	•••			"	""		"	****		·		"	"
2	7	***	•••	44	122	13	39	1	3	49	134	109	30 \$	1	10
8	155	•••	4	12	239	213	1,293	1	16	7	6 123	240	1,830	1	12,851
22	45	***	***	3	3					7		31	63	1	869
*	2	•••		17	15		"			26	21	45	84		4
	7		***				,						7	15,902	5,997
			***	,								'	_ `	63	184
	*	7.48	g are	12	asa		•-	١.,		••					
	1,181	147	2,373					17	491 		362	243	4,001	1,859	11,634
***						***		***							
**				•••			•••	***		***			•••		···
99,803	10,96,899	2,685	45,104	129,194	10,99,689	11,578	1.14,625	13,652	1,89,703	80,015	7,76,993	839,051	38,32,401	1,694,531	41,61,884
01,506	11,32,847	2,461	46,949	119,637	11,47,915	11,952	1,37,947	19,266	1,78,040	79,603	7,95,541	3,27,514	31,33,243	1,075,102	36,62,039
***		274		2,567			· · · ·	1,986	17,663	352		2,410		223,369	5,19,845
1,702	85,948	***	1,655	010	40,037	877	23,322	846			18,502		1,10,841		-

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APPEN

#### Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed

ere i	ts.					XXIX	<b>`</b> .						XX	ī.	·····	
1						8561	۵.						Tua			
			(I)	1		(2) Unrefi	n <b>ed</b> ,				(1)		(2)			
		Raliway system, wide Append.r St	Refined orgata ired ing sugar	includ-	(u) Euga	- 1	Gur, rab, n olases a Sacharine p	jaggary, ud other	Tota		Foreig	n.	India	ab.	Tot	tal.
	Sub-head.	,	Quant 17.	Zarving6.	Quantity.	Earnings.	Quantify.	Earnings.	Quintity.	Earnings.	Quantity.	Earnings.	Çuentity.	Earungs.	Quantity.	Earning.
1	_		Tons	Re.	lons	Rs.	Tons	Rs.	<b>W</b> 116.	Rs.	Tons.	Rs.	Топн.	Rs.	Tons.	R
		5 6"gauge. Bengal-Yappur	16,070	1,09,176	İ				27,667	ı			ļ	6,424		
١ ١	(0).	Bombay, Baroda and Central	44,762	5,44,169	384	2,0-5	30 240	97,200 3,01,221	75,368	2,08,396 9,47,475	381	5,143	373	5,048	873 603	10
10 (E)	), (c) (f) & (& (v)	Iudia.		1,20,407	,		80				1					
	•••	Eastern Fengal State	15,000	3,68,929	16,75	87,755	39,4 3	1,72 689	71,276	4,80,961			33,314	6,79,129	33,314	8,
	•••	Edet Indian	47,208 78,200	12,70,918	100,166	10,90,42	133,425	6,72,903 8,00,500	280,197	1,32,152 21,73 713		*** 9 190	2,021	43,220	2,024	42
1		Great Indian Peninsula	9312	65,821	12,(]1 1	93 267	96,102	8,09,500	184,171	9,34,181	139	2,180 18	I,031 846	24,498	1,170	3
		Nizam's Guarantord State .	3,997	81,007	7,303	20, ,18 2,901	61,133 5,001	2 5 ,740 85,715	7H,178 D 165	80,503	17	241	830	19,835	947 99	10
(6)	Æ (8)	North Western State	119,633	27,80,191			140,000		1	10,00,505	86V					
		Oudh and Robilkhand State .	21,193	1,51,117	52,169	2,€3,457 2,51,772	120,671	7 15 (8)	311,487 20 <b>3</b> ,3 <b>3</b> 3	11,17,078		20,7 17	2,125 2,352	31,417 13,004	2,994	١.
	•••	3' Si" gauge	.,,,,,	.,,	52,100	2,04,773	1,0,0,1	7,15,(8)	4174,703	-1,17,078			2,002	.,,00	2,352	1:
		J' 81" gauge	5.8	3 867	1 fp 3	7,919	2,212	10 176	1,113	21,712			20,178	1,54,818	29,778	3,5
1		Benguland North-Western	7,424	61,671	40.1	2,54,318	99, 31	6,0 ,7:7	146,714	4,11,596			68	760	66	13,0
		Bengal-Dooars	705	3,010	231	894	00,00	4,615	1,993	8,540			1	3 31,088		3,8
		Bha nagar-Gondal-Jun 13ad-Por-	10,210	46,011	1		3,611	11,628	13,751	58,272		10	83	616	84	100
		bandur.	1			•••	,,,,,,	11,020	20,701	53,2,2	•	•	8,	0.0	03	1
1		Burms	186	1,657	5,245	57,360	15,110	1,22,619	20,170	1,41,860	1,081	21,033	74	1,198	1,155	2
		Deoghar						***	•••			•••			***	
l		Dibru-Sadiya	571	3,124				•••	671	3,922	•	•••	9,79P	82,019	9,798	8
	(c)	Hyderabad-Gedavari Valley .	2,901	20,2.9	141	1,735	984	6,658	4,024	J2f5	3	51	3	45	6	
		Jedhpur-Bikaner	4,133	21.091	5,012	21948	9,220	56,776	18,101	1,06,101	4	63	1	28	6	
(0)	to (A)	Madras	6.8	3,064	824	2,603	1,455	4,777	3,4 7	10,415		•••	391	2,244	391	1
		Morti	20.3	20,	22	63	593	1,434	919	2,289	•••	•••	2	10	2	
(6) to	(m)	Rajputana-Malwa	25,653	2,74 385	40,710	3,51,319	99,227	9,54,583	159,590	15,80,370	451	8,825	216	2,287	607	1
(a	) & (b)	Rohilkund and Kumaon	2,718	6,953	7,550	20,042	27,145	1,04,573	37,413	1, 15,568		•••	196	1,774	195	1
		South Indian	16,779	74 311	6,669	23,472	36, 197	2,11,80	59,727	5,09,609	1	9	3,904	26,348	3,095	3
		Southe n Mahratta	1C 229	C8,034	7,195	48,603	53,518	3,31,272	70,912	4,51,100	38	654	52	904	90	1
	***	Udsipur-Chitor	378	1,928	675	3,307	1,161	5,436	3,214	10,671	***	1	-	6	•••	
1	•••	Barnect Bunrhat Light						•••				•••			***	1
1		Baral Light	705	1,761	1	8	124	373	830	2,137	3	6	•••		2	
		Bukhtiarpore-Behar Light											•••			
1		Cutch	251	742	710	2,104	1	5,249	2,704	8,135	•••		7 1	4	1	
l		Kalla Simla	294	3,696	417	4,544	l	9,0(4	1,672	17,211	15	<b>3</b> 01	20	384	35	
ì	(4)	Mourbhanj	. 32	* 66			7	19	39	85				1	•••	
	(d)	Parlakimed: Light	143	88			13	6	156	94	•••				***	Ì
ł	(c)	Powayan Light			767	802	ţ		767	692					•••	
;	44	Tarakeshwar-Mogra Light			126	131	1	132	278	263	**					
	•••	Tospore-Salipara Light 2' O" gauge.		-	3	21	-		8	21	***	"	4,356		4,856	3
	***	Darjeeling-Himalayan	. 59	1,162	843	1 4,461	74	1,240	978	16,863	***	-	4,417	6 1,974	6.417	7 0
	•••	Howrab-Amta Light														1
	***	Howrah-Sheakhala Light	.													1
۱		Jorhat								-	***				-	
1		TOTAL 1906 .	463,756	60,30,673	341,102	26,37,217	998,165	64,87,248	1,798,012	1,51,05,136	2,983	59,276	112,816	17,19,263	115,390	17
ł		Total 1905	327,831	88,82,023	806,758	18,23,607	889,011	57,85,468	1,522,807		8,079	58,779	99,320	14,43,600		-1
1		lucanasa.	136,314		35,347	8,18,610		6,51,785	275,706	36,14,045	•••	497	12,988	3,75,384		- 1 -
		1	1			I			I							

## DIX 17—continued.

## The earnings therefrom during the calendar year 1906.

over all railways in India and is therefore not the same as the total production.]

			I	XXI.						77	XII.				XXXI	i i — (cont	no bereit	Enllew	ing pag	re).	<del></del>
			To	BACCO.						• Wo	ю.						Woor				
Uam	1) anufao-		Manufi Manufi a)	ctured.	b)	Tota	al.	Tin	i) iber.	(i Manula		To	al.		l)	(a		Manufa (8	2) actured.		e)
		Cig		l	sorte.			unwro	iigne.							Carpeti rug	s and	Piece-g	node,	Piece-	roods,
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Farnings.	Quantiby.	Earnings.	Quentity.	Karnioge.	Quantity.	Earnings,	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earpings.
Cons.	Rs.	Tous.	Rs.	Tons,	Rs.	Tons.	Rs.	Tons.	Es.	Tons.	Rs.	Tons.	Ru.	Tous.	Re.	Tons.	Rs.	Tons.	Rs.	Tons.	Re.
9,010	87,092			888	13,397	9,929	1,00,479	76,703	3,33,115	2,711	20,124	70,447	3,63,339								
19,107	1,69,657	218	2,056	370	4,671	19,090	1,06,397	43,603	1,96,675	5,390	49,652	53,993	2,40,327	6,459	1,45,6à6	143	3,254	202	4,087	204	5,898
31,835	3,12,433			873	12,761	32,708	3,25,194	45,617	87,875	3,666	20,149	49,293	1,05,028	1,699	32,620					žo.	394
31,690	3,51,649	238	1,213	3,459	51,180	35,387	4,34,073	63,610	2,49,109	9,660	99,509	73,279	18,708	1,659	22,979	633	19,205	488	7,668	325	9,141
2,727	1,51,899	1,028	33,284	326	9,327	14,081		189,004	7,47,043	7,673	1,28,621		9,75,667	018	10,049	61	2,786	- 1	5,815	146	4,737
2,375	31,416	784 124	12,180 2,273	2,668 23	25,28 <b>2</b> 379	28,225 2,522	1,23,470 31,967	217,210	6,14,001 81,214	5,994 491	\$3,576 4,425	223,101 28,521	6,77,580 85,669	2,250 202	20,168	115	1,613	623	354	373	4,817 3,340
2,475 8,847	1,92,039	85	2,080	2,861	56,978	2,542	2 51,307		2,32,956	16,022	1,19,770	84,024	3,51,726	23,965	5,91,693	207	4,087	503	7,169	- 1	3,340 83,707
6,752	91,531	71	1,061	485	4,077	7,308	36,669	94,488	1,60,100	8,107	30,995	102,595	1,00,185	433	2,032	42	201	30	304	193	1,492
1,704	13,610	8	170	74	1,911	1.796	15,60 <b>3</b>	1,551	9,813	990	7,197	3,550	J7,010	1	27	٥	98				9
0,160	2,67,839	8	115	373	3,719	39,511	2,61,702	31,080	1,00,503	5,305	37,879	39,385	1,39,381	173	1,372	16	174	39	456	238	2,527
2,559	£,800			171	472	2,733	6,271	1,397	6,251	254	1,206	1,651	7,467				,				
2,241	11,599	15	54	228	1,560	2,483	13,312	12,211	54,738	1,087	6,157	13,328	60,895	600	5,738	1	9	1	3	15	70
<b>1,</b> 500	40,099	189	2,917	638	6,792	5,331	18,808	137,151	5,49,707	2,255	15,596	139,407	5,61,303	36	261	55	1,841	19	218	1	28
***					***			3,272	16,396			3,272	16,396						•••		
526 1,779	8,733 12,265	4 23	64 313	32 157	573 1,633	562 1,959	9,369	8,047 1,768	37,327 8,910	874 393	9,121 2,130	8,921 2,151	10,443	7 3,871	30,369	36 11	685 137	12	166	90	843 98
2,408	7,392	33	421	157	761	2,597	8,671	20,068	30,916	424	2,152	21,393	32,968	12	91	3	62	2	30	7	82
631	1,209	1	9	14	51	516	1,269	841	2,061	97	313	979	2,374	298	1,922		3			9	50
5,529	1,72,737	119	2,659	C51	9,171	16,294	1,84,597	26,3%	80,096	2,799	23,905	29,129	1,03,993	7,996	1,22,129	615	8,609	229	2414	475	11,418
<b>3,19</b> 5	10,062	31	505	205	1,717	2,431	12,294	29,516	94,092	1,220	6,343	30,745	1,01,325	311	1,884	15	123	4	123	22	174
9,503	48,649	1,450	15,566	1,255	5,815	12,298	69,830	121,220	1,85,659	6,030	10,393	130,256	2, 11,951	262	2,050	58	520	1	6	160	8,002
3,380	83,595	253	6,039	219	2,630 37	13,859	2,001	96,492	3,53,085	5,558	38,860	101,960	2,00,015	583	7,094		1	3	54	37	605
413	1,901	***	3	•	3"	-\$17	2,001	36	167	22	226	58	393	98	631	1	5			2	16
			•••																	-	
45	125	6	19	13	57	64	201	656	897	137	442	693	1,379	1	5						
 11	31	***					31			***	, a	 490	1 273								
219	2,706	 10	231	45	831	11 273	8,771	 897	19,070	355	1,223 3,517	428 1,232	1,273 14,193		62	16	429	19	272	52	1,101
16	36				13	20	49	223	597	12	45	235	642								н.
9				1	1	10	9	29	20	59	45	85	65			,					
 41	 81	•••		·,			 76	831	1,300		٠.,	831	1,300	۳.	ا					"	
41	51	•••				1	ا،	22	40 	1	4	23		3							
						1		,	"	"	"	"	"	<b>l</b> ‴	"		"		"		
50	964	188	4,951	59	1,210	207	7,136	149	1,376	187	3,409	335	4,875	3	53	3	87	5	141	13	313
•••		•••					•••							-					•		**
•••																					
																,		.			
5,073 8,317	20,38,307		95,784	14,059	2,45,104 2,06,957	-	-	1	39.93.582				0 46,21,21		-		48,164				82,846 93,58
2,768	1,21,410			2,208	18,207	14,636	1,31,117		2,91,980	0,748	-	161,000		-		247	330	-	10,270		
<b>}</b> ***		128	8,500		·		-		ححضت إ		15,508			-1	_		-	1,109	87,320	853	9,715

# ' Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed

2	lumpre.			XXX	C117.	†	XX	XIV.	1	
	UMDES.			Wootc	oncluded.					
Main		Ruilway system, <i>vide</i> Appendix 39.	Manufacture (a Other so:	2) d—concluded. l) s of manu- urcs.	То	TAL,	All other merch	articles of andise.	GRAND	TOTAL,
head.	Sub-head.		Quantity.	Earnings.	Quantity,	Earnings.	Quantity,	Earnings,	Quantity.	
					<b></b>	•			Quantity.	Earnings.
		5' 6" gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	(a), (b) & (e)	Bengal-Nagpur				<b></b>	137,243	6,95,161	3,999,315	
2	(a), (e) to (f) & (n) & (o).	Bombay, Baroda and Central dudia .	78	1,535	7,176	1,00,137	401,919	12,78,606	2,087,021	1,63,86,29
3	& (n) & (o).	Eastern Bengal State		<b></b>	1,729	33,014	111,205	6,00,314	2,065,098	1,27,44 41 1,32,59,07
4		East Indian	1,199	21,274	4,202	83,267	242,676	20,(9950	10,855,619	5.31,47,18
6		Groat Indian Peninsula	1,170	20,435	2,410	52,H22	311,992	30,03,253	4.063,574	4,10,99,05
6	(a) to (d)	Madras	548	5,070	4,895	40,00.	142,401	10,97,273		-,10,00,03
8	(a) & (b)	Nizum's Guaranteed State			621	7,191	16,830	1,42,040	2,314,405	1,18,91,95
9		North Western State	1,169	21,913	27,317	6,58,380	381,710	38,61,071	770,130	33,90,68
10		Outh and Robitkhand State 3' 31" gauge.	68	522	705	5,431	275,235	14,35,015	4,505,189 1,487,261	4,15,47,23 07,84,27
11		Assam-Bengal	26	461	. 33	595	17,088	97,081	476,434	10,47,25
12		Bengal and North-Western	1	4	<b>4</b> 60	4,533	97,084	3,57,484	1,680,900	*72,27,15
13		Bengal-Doones			•••		5,595	45,853	63,261	8,51,07
14		Bhavuagar-Gondal-Junagad-Porbander .	2	4	61"	8,524	9,1+5	40,109	200,522	6,×2,18
15		Burma	5	119	139	2, 197	191,445	7,25,936	1,415,286	72,45,95
16		Deoghur	-			•••	14,721	5,142	14,724	5,14
17		Dibru-Sadiya					43,128	64,807	657,140	8,28,49
8	(0)	Hyderabad-Godavari Valley		6	121	1,708	3,983	45,191	235,827	19,38,46
18		Jodhpur-Bikaner . ,	328	4,038	4,231	43,808	18,009	90,355	: 16,404	24,12,09
6	(e) to (h)	Mindras	73	<b>5</b> 52	97	817	7,104	45,199	106,416	3,15,30
10		Morvi	1	7	308	1,591	1,2 24	3 701	25,681	61,62
9	(b) & (q) to (m)	Rajputana-Malwa	153	3,093	9,3-8	1,52,663	2:8,714	12,53,378	2,318,622	1,78,54,15
20	(a) & (b)	Robikund and Kumaon	71	406	428	2,610	68,993	1,69,957	389,257	11,31,21
31		South Indian	61	808	839	6, 125	130,082	7,02,078	1,502,039	69,02,52
22	<i>"</i> "	Southern Mahratta	773	7,589	1,395	15,299	53,900	3,03,541	1,181,945	70,10,31
23	•••	Udaipur-Chitor		1	101	656	624	5,651	21,640	95,97
· 24		Baraset-Basirhut Light					4,154	6,075	4,154	6,07
25	•••	Barsl Light	6	22	7	27	720	2,356	54,677	1,93,79
28		Bukhtimpore-Behar Light					28,118	41,845	28,118	41,34
. 27		Catch					2,396	6,609	10,975	33,20
80	•••	Kalka-Simla	3	70	91	2,031	3,761	48,262	80,471	3,20,42
1	(6)	Mourbhauj ,					3,130	8,262	12,094	19,92
1	(d)	Parlakimedi Light					267	262	6, 135	4,80
20	(0)	Powayan Light			j		22,643	84,638	31,030	46,01
82	***	Tarakeshwar-Magra Light			8	4	790	<b>89</b> 0	25,578	17,60
83	•••	Tezpore-Balipara Light		[	•••		6,370	18,010	26,514	63,70
		2' O' gauge.	ا							
36 94		Darjeeling-Himalayan	6	116	29	209	4,218	48,219	39,233	5,04,06
36 57	•••	Howrah-Amta Light	<i>"</i> "	"		•••	19,5-5	81,748	19,505	81,74
37 38		Jorhat	""	""			7,26?	9,024	7,262	9,03
<b>3</b> 0							14,616	59,249	14,616	59,24
		Тотав 1906 ,	5,744	90,818		12,87,150	3,034,078	1,93,67,396	41,018,607	26,78,08,68
. •		Total 1905 .	5,023	87,780	65,440	12,17,929	9,144,057	1,81,30,495	40,788,401	24,49,06,776
,		Increase .	731	3,113	1,213	86,831		12,36,900	8,316,116	1,36,91,874
		Decrease .		}			109,079	` èss		***

# DIX 17-concluded.

## the earnings therefrom during the calendar year 1906.

over all railways in India and is therefore not the same as the total production.]

				ANIMA	Ls.					Момпан.	
	1) reos.	1	(2) tilo.		3) p, etc.	•	i) hants.	To	TAL.	Main bend.	Brwades.
Quantity.	Earnings.	Quantity,	Karnings,	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		
Tons.	Rs.	Tons.	Rs.	Топя.	Rs.	Tons.	Its.		RR.		
		l				l		Tone.			
178 220	8,809 8,004	8,301 10,899	30,800 2,16,400	3,643 17,759	97,626 3,45,353	25	1,778	12,144	85, 079	1	
26	615	2,613	29,415	108	1,357			28,908 2,507	5,69,757 28,317	<b>3</b> 3	
1,320	1,40,886	9,337	76,202	5,253	1,25,028		3,611	0,9th	3,45,820	4	
1,100	82,669	17,512	1,52,761	6,954	1,04,039			25,	3,00,199	6	
	•••	**		•						С	
2^7	5,762	43	863	54	780	•••		301	7,403	8	
2,012	52,769	4,205	50 179	427	16,207	·		6,794	1,25,135	ρ 	
422	23,681	839	6,511	16	470	•••		777	32,542	10	
ا و	ea	51	. 703	222	2,734	•		275	3,613	11	
¥ 135	4,729	4,600	62,539	69	805			4,601	68,133	12	
,										13	bealuding Du 8 49 494 1
16	191	81	775	10	112			107	1,081	14	* Excluding Rs. 5,42,494 in r peet of ferries and steam-bo which are included in
785	25,457	3,742	1,10,575	2, 137	63,850			6,991	1,90,882	15	details.
•••		 85								16	
62	 1,616	22	718		303			65 100	885 2,637	17 8	
36	726	22	350	7	60			. 65	1,136	18	
										G	
10	136	4	76		•••			11	212	19	į
381	0,546	3,063	46,50)	7,235	84,363		•••	10,687	1,40,718	2	
7	127	10	296	1	19			21.	442	20	
36 230	943 6,505	1,595 313	8,845 7,651	3,786 1,065	31,899 8,524	27	 891	5,417 1,665	41,076 23,564	21 22	
4	47	2	10					6	57	28	
						•••	•••			24	
	e-1									25	
·					*,*					26	
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									3	1	
	•••					•••		•••		20	
	•••				•••		***			32	
•••	•••				•••				•••	83	
			76						78	35	
	***	***				•••		•••	•••	36	
	•••		•• 			1 :		***		37 38	
		60,970	8,11,215						19,64,358		
7,169	3,48,197			49,072	8,23,640	52	6,306	1,17,293			
10,044	3,90,407	44,193	6,38,571	44,509	7,48,328	32	3,430	98,777	17,46,791		
***		10,777	1,72,644	4,564	75,817	20	2,876	19,506	1,07,027		
1,866	63,210	· · · · ·									,

APPEN

### Analysis of working of each railway \*

Note.—Railways not shown

ı		CIATUE.				5′ 6″							1
		Number.	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) t	o (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (
	Particulars.	Calen- dar year 1906.	Bongal- Nagpur	Bom- bay, Buroda and Central India	Eastern Bengal,	Fast Indian.	Great India Penin	sula.	Madras.	Nizam's Guaran- tood State.	North Western.	Oudh and Rohil- khand.	Аяявл Вепа
i	DESCRIPTION OF RAILWAY WORKED.	•		•									
	Gauge of railway		<b>5′</b> 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5' 6'	5' 6"	5′ 6″	3′ 3
l	Milenge worked Miles		1,698:32	804:03	407:95	2,32 <b>£</b> 95	1,091'57	1,178-72	1,425 22	351.70	4,111.18	1.220.92	7721
1	Number of stations No.  Total length of the following gradients:—		240	138	129	414	264	148	318	45	623	191	1
١	(a) $\frac{1}{50}$ and loss • Miles	i				5.90	19:31	)			\$8.62	0.19	10.
	(b) 11 to 13		0 15	1:32		17 66	2 82	6 75	22:54		93 23	9:30	33.
l	(c) 31 to 130	€	103 90	0.20		45186	61 90	11.23	58·9 <b>7</b>	79.19	137-10	6 41	25.
	(d) $\frac{1}{101}$ to $\frac{1}{100}$ ,		570.81	109 58		209-49	550-16	365 90	294.72	110 99	137 96	19.15	97
	(c) whit to rid.,		141 78	63:31	5.97	163:31	210.95	105-11	156.23	18 22	114:09	22.56	31.
	(a) Longth Miles		0.12	1:32	. 200	14 26	5 99	2.10	0.80	2.52	5.60	0.10	8.
	(b) Inclination		2/3	10	10°0	ď.	? tr	Å,	. 40	Tno	25	de.	١,
	FINANCIAL RESULTS.  Percentage of net carnings (including steam-boat fradic) for each half-year on epitaloutilay . Percent.  Percentage of net carnings for each half-year on paid up capital	1906 by half- years. 1-t half 2nd ,, 1-t half 2nd ,,	3 16 2·16 3·11 2 17	4:45 3:01 	1 42 3·77	4·91 4·11	1·61 2·96	2·52 1·80 2·57 1·86	2·54 1·45 2·54 1·46	3:47 2:96 2:07 2:55	2·56 2·71 	2 80 2 20 	0· 0·
	OUTLAY, EARNINGS AND EX- PENSES.												
,	(Exclusive of Steam-boat Service)  Capital outlay per mile open	Ist half 2nd ,.	1,46,200 1,49,160	1,49,859 1,90,755	2,05,033 2,08,52 <b>0</b>	2,30,348 2,17,710	2,00,0° 8 2,69,318	1,10,155 1,40,97	 	1,80,369 1,80,487	1,41,733 1,43,006	1,18,834 1,19,458	1,56,1 1,59,2
,	Total carnings per mile open per week	1st half 2nd ,.	318 271	591 458	428 662	701 658		481 379	502 275	250 241	321 317	273 231	١,
١	Total working expenses per mile open per week ,	1st half 2nd ,	131 139	260 234	307 333	266 262		222 207	154 188	105 95	172 161	137 127	,
	Total carnings per train-mile ,,	1st half 2nd .,	4°61 3°92	6.67 5.54	3 63 4:77	4 84 4 65		4·39 3·75	4.13	1·54 4·47	3.75 3.69	3.39	2 2
•	Total working expenses per train-mile ,	let half		2·94 2·81	2.61 2.42	1·83 1·85	1	2.03 2.05	2·26 2·76	1.70	2 00 1.87	1.70 1.70	2 2
,	Net carnings per train-wile ,,			8·73 2·71	1·02 2·35	3·02 2·80		2:26 1:70	2·17 1·27	2·81 2·73	1·75 1·82	1:69 1:39	0
۱	Cost per 1,000 gross ton miles moved (freight and dead weight)	1st half 2nd "	f 1·52 5·08	G 88 7:20	7·71 7·04	3·64 3·68		5·51 5·91	6·43 8·32		5:60 5:19	4·94 4·94	11 10
5	Percentage of total working expenses on total carmings	let hal		44.01 51.05	71·78 50·58	37·73 39·85		46•36 54•39	98.40 20.89		53°51 50°67	50·20 55 10	93 86
6	Percentage of total working ex- penses on total earnings, exclud- ing from both sides of the account the charges for carriage of revenue stores	let hal 2nd "	f 19:72 49:73		72·22 50·14			44·66 53·38	49·41 67·29		5 · · 26 49·03	48·17 53·20	98 86
-	(Inclusive of Stram-bout Service).									1			
-	Percentage of total working ex-												

DIX 18.

# system during each half-year of 1906.

do not prepare these statistics.

	la		<del></del>	<del>,</del>		8}"	<del>,</del> -					-	2′ 6″		GAUGE	T
12 (a) & (b)	14 (a) to (d) Bhav-	15 (a)	(b) & (c)	8 (c)	13 (a) to (c)	(g) to (m)	20 (a) & (b)	21 (a) to (f)	23 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (e)	Number.	
Bengal and North- West- ern.	nagar- Goudal- Juna- gad-Por- bandar	Burma.	Eastern Bengul.	Hydera- bad (to- davari Valley.	Jodh- pur. Bikauer.	Raj- putana- Mulwa,	Rohil- kund and Ku- muon.	South Indian.	South- ern Mah- ratta,	Udaipur -Chitor.	Jubbul- pore- Gondia exten- sion.	Kalka- Simla.	Konshul- garh- Kohat- Thal and Nowshe- ra-Durgai.	Reipur- Dham- tari.	Calendar year 1906	Serial number.
								3								
8′ 3}"	8' 91"	8' 8}"	3′ 87″	3′ 3}″	3' 3}"	3' 81"	8' 33"	8′33″	3′ 32″	3′ 3}″	2′ 6″	2' 6"	2'6"	2 6"		,
,621.76	1	1,840-15	881-82	391-13	833-22	2,079.85	340.36	1,855.79	1,723-42	68.72	241.77	59.44	131.98	56-69		
287	64	236	145	47	85	295	61	243	244	7	28	21	21	9		8
•••	1.83	64.52	0.37		•••	3.10	•••	C-01	15·66	•••	·	<b>660</b> 0	0.36	0.27		
·	0.58	81.83	0.64	•••	•••	0.23	6.41	14.61	75:82		<b>3</b> 1·51	2.38		***		li
0.69	1.69	47.78	2.02	••• ',		18 <sup>.</sup> 75	8.56	100-82	5 <b>5</b> 0·10	1.18	60.54	●9:94	43·55	•••		1
5-14	123.76	155.52	21.23	221.73	168-36	360-44	4.40	213.71	265 92	30.75	88:07	3.40	86 24	18.60		
4.61	64.74	107.78	15.13	13·95	61.24	173.72	6.83	108.56	98.45	6.98	18.39		22.74	1.95		
0-69	1.83	9:81	0.82	5.41	2.31	3:40	8.00	0.64	15·06	0.40	0.07	27·61	9-43	0.27		
, 18g	*\o	άγε	1 t t t	136.4	ıło	ᆉ	<b>y</b> ¹ű	Ja	1 80	រង់ត	15	s's	34	ŧτ		8
0.01	9:40	0.04													Calcudar year 1936 by balf- years.	*
3·61 2·74	3·40 2·16	2·84 1·41	2·98 4·14	3·51 1·80	6·67 3 61	5·32 3·82	3 99 2 95	2·95 2·87	2·21 1·29	4·34 2·19	1·25 0·68	0 93 0 81	-0·77 -0·29	* 2·91 1·25	1st half 2nd "	} 6
<u>:</u>				3·49 1·81				•••	•••		1·20 U·66	1.00	€	2 81	ist half	,
						•						•••	***	1 25	2nd ,,	} 7
77,498	49,860	98,706	00.000	a <b>n</b> 100												
182	49,963	99,878	92,880 88,901	67,182 67,810	25,616 25,662	74,295 75,092	52,707 55,395	78,879 70,374	79,156 79,063	30,759 30,811	50,941 52,361	291,623 267,210	65,311 65,219	24,820 24,926	1st half 2nd "	} 8
163 69	86	201	218 250	178 120	104 84	280 234	143 124	210 200	150 124	82 60	66 55	232 262	53 61	47 82	1st half 2nd "	} 9
75 3.06	3.98	143	133	86 72	98 48	123 120	60 76	110	81 84	30 34	40 42	119 177	71 67	20 20	lat half 2nd ,	}10
2.77	8.68	8·39 2·72	8·57 8·93	3·49 2·94	3.40 2.66	8·67 8·20	8 00 8 800	8·26 2·94	2·63 2·42	5·10 3·93	2·76 2·09	5·30 5·42	0·95 0·95	2·27 1·54	let half	}11
1·16 1·28	1.90	1.82	2·18 1·78	1.68	1·25 1·68	1.62 1.64	1·41 1·85	1.84 1.61	1 43 1 64	1·88 2·23	1·70 1·57	2·71 3·65	1.27	0 96 0 96	1st half 2nd "	}12
1.49	1.78	1·54 0·78	2·15	1.14	2·15 1·28	2·05 1·56	1.16	1·42 1·33	1·20 0·78	3 21 1.70	1.06 0.52	2·59 1·77	-0.00	1·31 0·58	let helf 2nd "	}18
4·83 5·48	8·76 10·19	8.36 8.36	11·17 8·54	8.87 8.08	5·64 8·07	6·59 7·05	6·74 7·18	9·29 8·18	7·29 8·79	8·12 11·41	8·40 7 67	81:00	21:87	9:75		•
97·88 46·26	42·02 51·62	54·68 71·36	61·14 45·26	48°25 60°84	36·65 57·09	44·01 51·26	42·12 61·51	56·87 54·72	54·28 67 68	36·94 56·73	61 58	41·55 51·22	17.83	12:07	znd "	}14 }.x
									J. 00	30-18	75.19	67:42	109-38	62-16	2nd ,	}15
86.79 45-02	41·15 51·26	58·80 69·78	58·25 44·06	46·87 58·44	85·67 55·87	43·07 50·06	41·51 61·07	55·79 54·04	52·77 66·84	36:92 56:70	14:64 49:07	51.13	185:04	38-52	let half	<b>)</b>
.			40.1							56.70	68 67	67:25	109.55	54-24	2nd "	} 16
19-79	42.09	55-29	62.74	48-85	86-65	44.01	89-80	56-87	£4.58	86-94	01.20	£1,00				
46 81	51.63	71.96	46 99	60-34	57:09	51.26	67.72	64 73	67-63	36.78	61-83 75-19	51·22 67·42	127-25 112-25	42-34 62-16	1st half 2nd p	}17

# Analysis of working of each railway

NOTE .- Railways not show

-		GAUGE.					5′ 6″			,		
١		Number	1 (a)	2 6	3 (α)	4 (a) to (d)	5 (a) to (1)	6 (a) to (d)	8 (a)	9 (4) to (y)	10 (a) & (b)	11 (a)
	Particulars.	Calendar year 1906 by half- years.	Bengal- Nagpur.	(a)to (f) Bourbay, Baroda and Central India,	Eastern Bengal.	East	Great Indiau Peninsula.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Oudh	Assam Bengsi
	DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC.			•								
8	Total working expenses for both coaching and goods traffic excluding steam-boat expenses, and after deducting telegraph and sanday receipts (in thousands of Rs.)	s. { lst half 2nd ,,	54.54 56,78	54,76 49,31	37,46 41,04	1,51,22 1,54,57	1,61,97 1,50,48	54.14 67,97	9,06 8,01	1,75,98 1,69,96	80,07 87,28	16,31 19,06
	Proportions, dividing expen- diture in ratio of gross ton- mileage (froight and dead load)—	/										
9	Coaching in thousands of Rs.	, {   1 half	18,75 16,85	19,74 21,48	17,81 17,24	42,03 43,71	51,18 57,96	17.41 23,71	1,95 2,18	52,05 54,29	17,70 18,22	6,0 6,2
0	Goods in thousands of Rs.	let half 2nd "	40,79 89,91	35,02 27,83	19,65 23,80	1,12,19 1,10,86	1,10,81 92,52	86.73 44,25	7,11 5,58	1,23,83 1,15,67	91,88 19,05	10.35 12,85
ŀ	COACHING TRAFFIC.											
	Gross receipts and train-mileage (in thousands)						,	·				
1	Receipts from coaching traffic Rs	. { let half 2nd .,	42 35 38,27	29,59 37,87	25,65 25,76	1,30,63 1,20,38	97,97 93,∷8	41,17 38,40	6,03 5,29	1,03,19 1,08,91	42,11 36,15	8,7 8,2
2	Coaching train-miles run . N	o. { lat half	1,171 1,264	1,129 1,167	920 979	3,782 3,745	3,638 3,847	1,058 1,213	159 173	4,680 4,420	1,590 1,594	29 82
3	Average coaching receipts per train-mile R	let half 2nd ,,	1	3·51 8 z0	2·79 2·63	3·45 <b>3</b> ·21	2:69 2:10	8-92 8-17	3.66 3.80	2·53 2·43	2·67 2·27	2·90 2·50
ŀ	<b>&gt;</b> .	_					 					
١	Units and Unit-mileage.											
	Number of units carried one mile (in thousands)—											
44	lat class Unit-mil	lst bali 2nd "	1,555 1,509	2,160 1,754	1,030 1,244	5,105 4,902	8,060 9,261	2,860 2,351	354 ¥71	4,931 4,673	2,095 1,719	29: <b>3</b> 0:
5	2nd ,,	{ lst half	3,575 4,710	13,620 11,774	2,674 3,482	11,821 14,532	81 627 82,094	8,810 11,080		12,409 15,608	5,628 5,742	48 53
6	3rd or intermediate class 1 ,,	{ lst half	8,005 10,389	15,929 15,652	14,314 18,143	53,243 59,806	61 812 61,342	2,928 2,572	4,561 5,145	48,368 53,640	23,808 24,505	89 40
7	4th or lowest ,, ,,	lst half		239,073 220,632		944.981 764,729	533,387 481,584	262,830 217,574		675,929 683,753	247,871 207,276	49,38 <b>45</b> ,08
8	Total passenger unit-mileage	Ist half	1	270,781	167.800 157,410	915,100 843,969	634,916 584,281	277,452 263,577		741,687 787,669	279,392 257,2±2	50,49 46,27
29	Other coaching traffic . Ton-mil	( lat hali		8,116 8,196	1,105 1,407	9,326 9,061	0.313 8,262	3,170 2,819	476	5,281 7,488	1,874 1,681	36 40
	Average sum received for carrying a unit one mile—											
ю	1st class	es { lat half 2nd ,,	15 08 18:27	10·11 10·22	13·71 12·56	14.66 14.80	10·95 10·76	12·16 12 44	14·99 . 15·28	11:48 11:68	11·71 12·00	16 4 16 2
11	2and ,, ,,	{ let half 2pd ,	6.65 5.98	4·55 4·96	6·83 5·64	6·76 6·22	4·27 4·55	4·97 4·00	4·69 4·89	5·21 4·79	5·34 6·87	7·9 7·8
19	Srd or intermediate class ,,	1st half 2nd ,,	8:27 8:18	8.00	2·97 2·61	8·25 8·00	2·07 2·97	4·50 4·60	2 50 2 50	8·02 8·02	8.08 8.03	4·0
18	4th or lowest , ,,	{ let half 2nd ,		2·94 2·28	2·41 2·50	2 24 2 21	2·16 2·16	2·24 2·23	1.09	2·26 2·26	2·47 2·44	2-8 2-8
4	Average for all classes ,	let half	3.23 3.23	2·46 2·51	2·63 2·70	2·43 2·40	9·45 2·51	2 46 2 41	2·81	2·42 3·43	2·64 2·64	8.0
- [	Other coaching traffic per ton-mile	2nd "	40.08	29.87	46.40	80.49	84.65	86.10	42.58	35.44	40-68	42.8

# DIX 18—continued.

# system during each half-year of 1906—contd.

do not prepare these statistics

	GAUGE.		2′ 6′′							ł"	oʻ 3					
	Number.	1 (e)	9(h) & (i)	<b>30</b> (a)	1 (b)	23(a)	22 (a) <b>t</b> o (j)	21 (a) t <b>4</b> (f)	20 (a) & (b)	(g) to(m)	19 (a) to (c)	8 (c)	8 (b) & (c)	15 (a)	14 (a) to (d)	12 (a) & (b)
#um Ser	Calendar year 1906 by half- years.	Raipur- Dham- tari.	Khu-hal- garh- Kohat- Thal and Nowshera- Durgai,	Kalka- Simla,	Juhhul- pore- Gondia exten- sion.	Udaipur -Chitor.	South- orn Mah- ratta.	South Indian,	Rohil- kund and Ku- maon,	Raj- putana- Malwa.	Jodh- pnr- Bikauer,	Hyder- abnd- Goda- Vari Valley.	Eastern Bengal.	Burma.	Bhav- nagar- Gondal- Juna- gad-Por- bandar,	Bengal and North- West- ern.
} 19	lst half 2nd "	<b>2</b> 9 <b>29</b>	2,42 2,26	1,82 2,69	2,46 2,61	51 58	35,58 86,69	40,94 87,45	5,32 6,89	64,61 62,74	8,05 10,13	8,31 6,97	26.94 23,99	46,18 48,34	5,94 4,90	27,05 80,74
}19 }20	lst half 2nd ,, lst half 2nd ,,	8 9 21 20	98° 1,01 1,44 1,25	89 1,13 93 1,56	91 93 1,55 1,68	83 41 18 17	11,59 13,62 24,05 23,07	18,82 17,21 21,52 20,25	2.26 4, <u>1</u> 0 3,06 2,79	20,71 24,28 43,90 38,51	2,83 4,84 5,22 5,78	2,82 3,08 5,49 3,88	10,82 8,92 16,12 45,07	16,86 18,58 £9,32 29,81	2,62 2,99 2,72 1,91	11,43 14,17 15,62 16,88
} 21 } 29 } 38	lst balf 2nd s 1st half 2nd s 1st half 2nd s	30 26 11 12 2.76 2.10	1,08 1,21 76 91 1,42 1,84	2,06 2,21 85 80 5-96 7-21	1,92 1,59 50 59 3:68 2:67	81 65 17 87 4.73 2.44	23,83 21,73 995 995 2:89 2:18	41,01 58,40 1,165 1,229 3:52 3:13	5,52 5,55 173 208 3:19 2:67	49 03 48,11 1,800 1,999 2.79 2.41	7,00 7,07 267 302 2 66 2 51	5,43 4,90 187 187 2:89 2:03	18 80 22 45 638 697 2 94 3 22	39,3% 32,04 1,001 1,026 8-93 3 12	5,28 6,50 180 183 2:79 3 50	32,67 31,42 1,263 1,362 2,59 2,31
	Jut half	5	55	103	. 87	29	954	1,241	156	1,842	309	164	579	1,447	189	456
}24	2nd ,,	5 3 6	61 83	123 190	89 81	20 67	995 8,772	1,042 6,239	160 976	1,081 3,886	215 752	1,860	645 1,626	1,315 9,615	189	1,208
}25 Loa	2nd ,	6 31	98 78	218	62 62	53 7	8,599	4,368	1,027 405	4,256 10,246	831 1,997	1,888	1,167 7,726	3,362	1,227	1,924
} 27.	ist half	1,702 1,494	7,030	1,676 1,671	15,750	66 6,454	172,764 158,664	316,761 321,818	98,418 37,144	384,376 381,682	9,261 52,768 55,074	41,924 37,206	0,985 114,806 184,699	227,394 179,894	1,4:8 41,267 37,206	5,598 293,125
} }28	2nd ,, 1st half 2nd ,,	1,744 1,525	9,104 8,146 9,312	1,969	13,556 15,930 18,726	5,165 6,557 5,304	177,490 163,258	354,244 327,228	39,955 36,802	899,850 397,224	55,821 58,331	43,948 39,266	124,787 142,589	228.486 184,571	44,107 40,070	268,187 289,775 275,479
} 29	ist half and ,,	7 6	28 27	49 52	42 40	42 56	1,347 1,113	860 853	168 177	3,000 3,002	326 402	245 187	750 1,011	995 968	241 122	758 964
}30	lst half	15:40	11-80	49·32 49·82	15·85 15·52	17:85 17:93	15:45	11 78 11 69	25·58 27·87	14·10 18·88	11·57 15·14	11·45 11·79	13·84 18·82	16·13 15·29	11·94 11·29	12.08
}sı	2nd ,, 1st half 2nd ,,	7·93 7·40	5:81 5:68	27·48 27·48	8.00 7.81	8·97 8·98	15.89 5.86 5.94	4:33 5:66	7·80 8 66	6·47 6·58	6.25	4·55 8·05	6'68 7'57	8:04 7:78	5.65 5.64	1299 632 609
}32	1st half 2nd ,,	4·50 4·50	3.00		4·50 5·38	2 99 8 00	\ ::		4·29 4·46	3.33 3.33	2·78 2·86	:::	8:00	:::	4.00	8-19 8-15
}88	1st half 2nd ,,	8.00 3.00	2·25 2·25	8.00 8.00	2·00 2·00	1.99 1.99	3.09 5.08	2.03 2.04	2·15 2·15	2·01	3.06 3.06	3.00 3.00	- 9:50 2 45	2·99 2·97	2·75 2·75	1.99 1.99
}34	1st half 2nd ,,	3.06 3.08	2:36 2:85	12 <sup>.</sup> 90 13 47	2:07 2:08	2·14 2·13	2:24 2:25	3·10 2·13	3:40. 3:45	3·13 3·13	9:19 9:20	2·14 2·19	2·64 2·66	8·16 3·14	2-92 2-92	2 05 2 05
}85	let half 2nd ,,	45·40	58·18 52·90	204 05 206 09	47°15 47°81	35.63 88.41	44.66 48.50	50·61 50·08	59.44 64.17	30 84 27-99	42.26 42.02	40°58 48°85	48·58 49 24	34·81 36·46	47-69 47-91	89-18

APPEN

## Analysis of working of each railway .

Norg.-Railways not shown

		GAUGE.					5′ 6″					
انه		Num- ber.	1 (a)	2 (a) to	3 (a)	4(a) to (d)	(a) to (f)	6 (a) to (d)	8 (a) & (b)	(a) to (g)	10 (a) & (b)	11 (a)
Serial number.	Particulars.	Calendar dar year 1906 by half- years.	Bengal- Nagpur.	Bom- bay, Baroda	Eastern Bengal.	East Indian.	Grout Indian Penin- sula.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Oudh	Assam- Bongul.
	COACHING TRAFFIC—contd.											
	Units and Unit-mileage-concld.											
	Average number of units in a train—											
36	lat class No. {	1st half 2vd ,,	1·33 1 19	1.01 1.50	1·12 1·27	•1:35 1:31	2·22 2·41	2·70 1·91	1·13 0·69	1·21 1·06	1:31 1:08	0·99 0·95
87	2nd ,, ,, {	1st half 2nd ,,	3·05 3·72	12:08 10:09	2 90 3 55	3 13 3 88	8:69 8:34	8:36 9:14	7:25 5:42	3·04 5·58	8·54 8·60	1·65 1·64
38	3rd or intermediate class , {	1st half	6·83 8·22	14 10 13 42	15·56 18·13	14·08 15·97	17 00 15 95	2·76 2·12	) (	11.86 12.14	10.98 14.13	1·12 1·24
# 89	4th or lowest ,, , , {	1st half	289·52 195·85	211·69 189·10	162·77 137 42	223 38 204:18	146·63 125·18	248·44 204·12	91.16	165-68 154-71	155:92 130 03	167·61 138·95
40	Total passenger units , {	hali 2nd ,	250 <b>73</b> 203 98	229.76 214 11	182-95 160-77	211.03 225.34	174.54 151.88	262 26 217:32	132:29 97:18	181·79 171·44	175·75 148·83	171·37 142·78
41	Other coaching traffic Tons {	1st hal 2nd ,,	1·50 1·87	2·76 2·74	1·20 1·43	2·47 2·12	2·57 2·15	3·00 2·32	1.52× 0.95	1·29 1·68	1·18 1·05	1·22 1·26
	VEHICLES AND VEHICLE MILEAGE—				<del>                                     </del>							
	Number of coaching vehicles hauled one mile (in thousands)—											
42	lat class Vehiclo-miles	1st hal 2nd ,,	1.447 1.474	826 867	1,115 1,213	4,410 4,515		1,495 1,373	395 468	4,592 4,792	1,717 1,688	446 582
43	2nd " ,,	1st bal 2nd ,	1,247 1,350	2,071 2,134	1,078 1,166	5,693 5,853		1,648 1,663	362 461	4,002 4,867	1,516 1,432	437 521
41	3rd or intermediate class ,, {	1st hal 2nd	f 1,220 1,313	1,044 1,217	1,890 2,008	<b>6</b> ,556 6,217		278 189	1	5,331 5,597	2,544 2,605	282 217
45	4th or lowest ,,	]sthal	11,641 12,820	9,652 9,063		37,350 36,497		9,741 10,053	1,570	32,416 36,160	9,710 9,230	3,358 3,496
46	Othor vehicles ,	1st hal 2nd ,,	1,015 955	1,744 1,925		5,520 5,709		1,638 1,472	201 187	3,108 4,282	1,125 1,473	540 570
47	Brake-vans	1st hal 2nd "	1 2,157 2,421	1,435 1,545		6,521 6,117	6,891 6,591	2,279 2,713	852 437	6,655 6,628	2,409 2,419	359 405
48	Total ,	let hal	f 18,727 20,333	16,775 17,351	13,738 14,470	63,050 64,938		17,059 17,463	2,887 3,295	57,034 62,326	19.021 18,845	5,422 5,741
	Average number of vehicles in a coaching train-		-		-		-	ļ			-	
49	lat class . No.	1st hal 2nd ,,	1 1·24 1·17	0·73 0 74		1·17 1·21		1·41 1·13	1·24 1·19	1 13 1 08		1·51 1·64
50	2nd ,,	1st hal	1	1:84	1.17	1·51 1·56		1:56 1:87	1·16 1·18	1·13 0·10	0.95 1.80	1·48 1·61
51	3rd or intermediate class ,,	1st hal 2nd ,,		0.92		1·47 1 66		0·24 0·16	h s	1·31 1·27	1 60 1 63	0·96 0·67
52	4th or lowest ,,	1st hal 2nd ,,	9 93 10·14	8·55 8·28		9·84 9·74	6.36	9·21 8·29	5:01	7·95 8·18	6·11 5·79	11·40 10·78
53	Other vohicles	let hal 2nd ,,	0 87	1:84 1:65	1.74	1·46 1·52	1 80	1·55 1·21	0.64 0.48	0.83 0.97	0·71 0·92	1·88 1·76
54	Brake-vaus	let hal 2nd ,,	1	1·27 1·83		1·72 1·63		2·16 2·24	1·14 1·11	1.63 1.50	1·52 1·53	1·22 1·25
55	Total "	1st hal 2nd ,,	f 15:98 16:09	14:85 14:67		16:67 17:34		16:13 14:40	9·21 8·41	13.98 14.10	11·97 11·82	18:40 17:71
	Average earnings per cosching vehicle per mile—	"		-	-	-	-					-
56	lat class Pies {	1st hal 2nd ,,	f 16*22 13*58	26·44 20·68	12:67 13:92	16:97 15:42		23·27 21·29	13:42 8:83	12:33 11:80	14-22 12-24	10.78 9.40
87	2nd " · · "	let hal 2nd "	f 19:07 20:85	29·85 27·86		14·04 15·45		26·67 26·68	29·42 22·51	14·05 15·36	19·82 21·58	8:86 7:97
58	Erd or intermediate blass ,,	1st hal 2nd ,	£ 22·16 25·17	45·74 38·55	23·60 23·60	31·13 28·61		51.02 61.41	1	27·86 28·90	28 <sup>-34</sup> 26 <sup>-</sup> 14	4·71 7·25
. 59	4th or lowest ,, ,,	1st hal 2nd ,,	57:41 45:53	55·49 52·02		53·64 46·25		91.88 90.26	50.71	47.06 42.76	63.08 54.79	49:30 37:21
60	Other vehicles	let hal 2nd ,,	69:47 73:04	53·36 47·56	32·23 48·76	51·51 49 68	49·44 45·71	69·85 68·67	100.60 70.78	54-92 59-26	67·78 46·72	28-56 30-43
,					],							

#### DIX 18-continued.

# system during each half-year of 1906—contd.

do not prepare these statistics.

3 (a)	14 (a)	35()	3 (b)	1	18 (a)	2	20	21 (a)	22 (a)	1		1	,	1	-	-
s (b)	Bhav- nagar-	15 (a)	and (c)	8 (c) Hydera-	Jodh-	(y)to (m) Raj-	(a)& (b) Rohil-	to (%)	to (j)	23 (a) Udai-	1 (b) Jubbul- pore-		9 (h) & (i) Khushal- garh-Ko-	1 (*)	Number. Calendar	1
orth- lest-	Gondal- Juna- gad-Por- bandar.	Burms.	Eastern Bengal.	bad-Go- davari Valley.	pur- Bikaner.		and Kum- aon.	South Indiau.	theru Muhrat- ta.	pur- Cihtor	Gondia exten- sion.	Kalka- Simla	garh-Ko- hat-Thal and Now- shera- Durgai.	Raipur- Dhamtari	year 1906	
0°36 0°31	1:00 1:04	1.44 1.28	0.91 - 0.82	0.28 0.28	1·16 0·7J	0·74 0·52	0:90	1.06	0.98	1:63	0.75	2:00	0.73	0:48	let half	}
0.98 0.97	6·52 6·71	3·64 3·27	2:55 1:67	5·99 6·10	2·81 2·75	2·16 2·13	0·77 5 63	0.85 5.36	3.79	0.76 3.94	0.62	4 04 5 48	0.67 1.10	0·23 0·54	2nd ,, 1st half	}  }
3·95 4·11	7:48 7:93		12·11 8·73		7 48 7 49	5·69 5·13	4·94 2·34 2·27	3·55 	3·62 	0.40	1.35	7·15	1.08	0·49 2·92	2nd ,, let half	  }
24·21 96·87	217·96 203·63	223-13 175-03	179·98 193·13	195·08 120·64	197·59 182·45	213·51 190·89	221.84	297:67	173.64	2·45 377·90	0.86 317.92	48'42	0:54 104:38	1·81 158 25	2nd ,, lst half	3
29·48 22·26	232·96 219·31	228:21 179:57	195·55 204·45	141.60 127.32	209·04 193·40	223·10 198·67	178·75 230·71	361·94 304·09 266·34	159-41	193 03 383 92	227·96 821·56	54·85	100:42	122·09 162·19	2nd ,, 1st half	}
0·60 0·71	1·27 0·99	0.99	· 1·18	0·79 0·60	1·23 1·33	1.67 1.50	186•78 0 97 0 85	0 74 0 69	164 03 1 35 1 12	198-22 2-43 1-35	0.84 0.88	1.42	102·71 0·36	124 62 0:65	2nd ,, 1st half	ľ
							0 63	• • •		,		1.71	0.29	0.47	2nd "	ľ
																l
2,214 2,237	314 310	1,528 1,556	930 854	331 <b>8</b> 31	330 351	2,420 2,501	307 <b>37</b> 1	1,326 1,445	1,423 1,438	22 28	67 76	36 42	35 42	6	1st half 2nd ,,	ß
,907 ,967	414 430	1,907 1,911	769 799	858 363	350 <b>3</b> 48	2,310 2,431	259 328	1,413 1,589	1,407 1,408	29 22	66 76	37 <b>4</b> 1	35 41	6	1st half 2nd "	}
,274 ,212	300 341	 	1,465 1,560	:::	438 418	1,112 1,214	168 158			6 28	39 4 <b>5</b>		50 43	) [	1st half 2nd "	}
,117 ,661	2,450 2,451	15,051 15,630	7,145 7,634	1,682 1,609	3,525 3,7 <b>46</b>	24,994 27,095	2,352 2,679	16, <b>92</b> 6 17,420	11,577 11,229	332 266	1,248 1,398	152 154	478 635	138	1st half 2nd ,	}
441 440	127 131	1,069 936	928 888	154 147	31 <b>7</b> 367	1,703 1,830	58 146	2,080 2,018	1,424 1,197	<b>6</b> 8	49 81	] [	37 104	7 7	1st haif 2nd ,,	}
,799 ,250	474	1,431 1,465	783 824	299 296	912 93 <b>3</b>	4,221 4,880	564 418	1,116 1,060	1,646 1,613	54 52	49 53	71 78	<b>76</b> 60	19 21	1st half 2nd ,,	}
,752 ,776	4,079 4,110	20,984 21,498	11,970 12,559	2,824 2,746	5,872 6,103	36,760 39,951	8,708 4,100	22,891 2 <b>3,5</b> 62	17,477 16,970	449 404	1,518 1,729	299 315	711 925	176 164	1st half 2nd ,	25
1·75 1·64	1.66 1.70	1·53 1·51	1· <b>46</b> 1·22	1·07 1·07	1·24 1·16	1·34 1·25	1·77 1·78	1·14 1·18	1·48 1·44	1 30 1 03	1°34 1°29	1.04 1.37	0·46 0·47	0·59 0·53	1st half 2nd ,,	<b>}</b> ,
1·51 1·45	2·19 2·34	1.86 1.86	1·21 1·15	1·15 1·18	1·31 1·15	1·28 1·24	1 49 1 28	1·24 1·29	1.41 1.51	1·68 0·84	1·34 1·29	1.08	0 46 0 45	0.59	1st half 2nd "	}
1·80 1·62	1.18 1.87	::	2·29 2 24	:::	1·64 1·49	0.61 0.63	0·97 0 76	:::	·	0·37 1·05	0·78 0·74		0°66 0°47	12.82	1st half 2nd ,,	}!
5·93 5·17	12·94 13·41	15.08 15.21	11·20 10·95	5·42 5·22	13·20 12·41	13·88 13·55	18·59 12·89	14:53 14:18	11.64 11.28	9·96 9·96	25°20 25°50	4·39 5·07	6·29 7·00	10.12		}
0·35 0·33	0.67 0.72	1·07 0·91	1·45 1·27	0·50 0·47	1·19 1·22	0.95 0.91	0·34 0·71	1·78 1·67	1·43 1·20	0·86 0·29	0·99 1·36	ا. ا	0·49 1·15	0.69 0.56	1 1	}:
2·23 2·89	2·50 2·45	1·43 1·43	1·15 1·18	0.86 0.86	3·41 3·09	2·35 2·44	3·26 2·01	98.0 9.96	1.66 1.62	3·13 1·98	0.30	2.15	1.00 0.66	1·73 1·70		}!
3·56 2·60	21·54 22·49	20·96 20·92	18·76 18·01	9·10 8·90	31 99 20 52	20·42 19·98	21·42 10·78	19·65 19·18	17:57 17:05	26·80 15·10	30·64 29 08	8:66 10:85	9,36 10 20	16:42 18 44	let balf 2nd "	}5
8·67 2·44	6·82 6·89	15·92 12·92	8·61 10·43	5·69 6·33	10·83 9·29	7·81 5·72	13·02 12·00	11·03 8·43	10·86 10·69	29·08 13·20	8·85 7·81	165·93 169 44	18·60 16·63	12 62 6 45	let half 2nd ,	} 5
3·88 1·10	16:81 16:10	15·38 18·60	14·12 13·98	23·67 26·18	13·48 15·53	10·89 11·44	29·42 27·11	18·73 15·57	15·72 14·29	21·06 21·68	§·73 8·20	163·11 171·08	13.85 13.04	7:33	lat half	} 5'
7-98 7-98	16.99 16.99	:::	15·85 17·95	:::	12.65 14.44	27·59 25·28	10 <sup>-33</sup> 13 <sup>-29</sup>	:::	::	3·18 7 0 i	7·27 6·19	:::	4·67 8 41	1	1.	<b>}</b> 8
3·07 5·86	46·32 41·74	44·44 34·13	40·17 43·45	49·88 46·28	30·81 30·24	30·97 28·30	35·13 29·77	41·49 37·75	31·14 29·48	38·79 38·69	25 23 19 40	115-85 113-53	87·34 32·26		1st half 2nd ,,	}5
1.12	96.35 30.39	82·42 87·71	84·41 57·92	64 84 55:77	48·40 46·05	54·84 45·90	171-87 77 81	20·93 20·84	42°24 41°36	238 77 151·06		134 48 137 16	39·26 13·45	42 <sup>.</sup> 92 88 <sup>.</sup> 02	ist half	}•

APPEN

# Analysis of working of each railway

NOTE.—Railways not shown

		GAUGE.				5′	6"					Γ
i		Number	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	ઉ (ત) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
Serial number.	Particulars.	Calen- dar year 1906 by half- years.	Bengal- Nagpur.	Bom- bay, Baroda and Central India.	Eastern Bengal.	East Indian,	Great Indian Peninsula,	Madras.	Nizam's Guarau- toed State.	North West- ern.	Oudh and Rohil- kund.	Assam- Bengul.
;	COACHING TRAFFIC-contd.	(										,
	concld, Carrying capacity hauled one mile (excluding brakes) (in thousands)—											
61	1st class Scals {	lst half 2nd ,,	13,043 12,929	20,578 21,217	23,553 25,744	64,100 67,210	77,723 85,297	14,572 13,988	4,965 5,938	82,585 85,873	38,880 37,609	5,218 6,143
62	2nd ,, ,, {	lst half 2nd ,	17,207 18,523	69,053 70,229	26,188 28,451	123,544 127,421	160,682 175,708	28,541 28,46 <b>6</b>	7,991 10,232	96,302 130,371	34,4°3 32,417	5,099 6,067
63	3rd or intermediate class . " {	1st half 2nd ,.	40,967 42,236	43,944 50,420	86,318 94,259	247, 182 273,885	220,538 226,806	10,216 7,472	][	186,976 199,721	88,671 90,910	6,392 4,151
64	4th or lowest class, {	1st haif 2nd ,,	617,361 668,275	526,499 521,784	395, <b>32</b> 6 416,261	1,942,311 2,014,669	1,175,214 1,207,637	571,048 589,838	85,944 95,600	1,714,813 1,918,151	545,284 537,438	118,075 124,315
<b>6</b> 5	Other vehicles Tens {	1st half 2nd ogs	8,432 7,205	8,704 9,471	15,179 13,619	51,669 46,303	33,549 34,200	9,787 8,378	1,243 1,482	43,896 58,516	25,570 27,696	1,656 1,732
	Percentage of freight upon capacity hauled-											
66	1st cluss Per cent. {	lst half 2nd ,,	11°92 11°66	10 50 8:27	4:37 4:83	7 93 7 29	10:87 10:86	19.63 16.80	7·12 4·57	5·97 5·41	5:36 4:57	5·60 5·02
67	2nd ,, ,, {	lst half 2nd ,,	20·78 25·43	19·72 16 77	10·21 12·24	9·57 11 10	19:68 18:27	31·19 38·92	28:42 20:76	12 <sup>.</sup> S9 15 35	16·35 17·71	9·51 8·76
€8	3rd or intermediate class ,, {	1st ha'f 2nd _,	19:54 24:60	36:25 31:04	16:58 19:24	21·51 21·84	28:01 27:05	28 60 34·13	45:18	25°87 26°86	26·85 24·75	5·17 9·61
69	4th or lowest class, $\left\{\right.$	1st half 2nd ,,	45·45 37 05	45°41 42°28	37:89 32:32	*43.50 37:40	45:39 39:88	16:03 41:97	37.37	39·43 35·74	43·85 38·57	41·82 36·23
70	Other venicles	1st half 2nd "	20 S1 24 12	35 80 33 74	7:28 10:33	17 0; 19 57	27.95 24·15	32 39 33 65	88:33 25 21	12·03 12·71	7:13 6:07	21·74 23·51
	WEIGHT OF THAIN AND TON- MILEAGE. Gross ton-mileage of all coaching											
71	Froight	1st balf 2nd .,	19,514 17,743	19.725 .8,490	11,175 10,972	61,673 60,186	48,393 44,331	20,109 18,950	3,023 2,714	50,224 53,397	18,83 <b>4</b> 16,099	3,411 3,207
72	Dead weight	1-t half 2nd ,,	284,544 314,233	262,298 279,676	219,975 233,849	1,089,171 1,128,691		250,611 265,837	41 902 47,161	879,002 993,712	348,384 353,051	51,142 56,696
78	Total ,	lst half 2nd .,	304,058 3 1,976	259,0 % 298 166	251,050 214,-21	1,153 814 1,186 877		270,720 2×4,787	44,925 49,875	929,256 1,047,109	367,218 369,150	54,553 59,903
	Average weight of a coaching train-	lut half	16:66	17*46	12 15	17:10	13 30	19 01	9 65	12:31	11.85	11:58
74	Freight	2nd ,, let la'f	212.53	15 85 2°845	238-94	16:07 257.95	241:94	15 63 236 89	6·92	12·08 215·47	10 10 210·15	9·89 173·57
75	1	Lat half	245-58	239 71	238 80 251 09	301:36	243 31	255.90	120 85 143 36	121·85 227 78	231 00	174-92
76		2nd ,.	262.62	255-56	250 01	317:42	:51 83	231 81	117-27	136.93	2::1-57	184 81
77	Average cost of hanling a coaching train one mile	11-t. balf	J 17 1:33	1 75 1 84	1 94 1 76	1 11 1·17	1 41 1·51	1.65 1.95	1·22 1·26	1.53	1·12 1·14	2·04 1·93
78	Average cost of hauling a coaching vehicle with its load one mile.	1-t half 2nd	15:94 18:08	24.71 26°09	26'98 24 75	11:60	21:68 23:59	22·61 30·86	14.76 11.62	19 84 18:72	20·56 21·30	22·79 22·46
	Average cost of hanling a coach-											
79	1	1st balf 2nd	0.85 1.16	1 26 1 17	1·72 1•77	0.80	1 34 1 66	1:09 1:58	0 83 1·02	1·26 1·28	1·15 1·37	2·06 2·31
80	Other traffic per ton ,, {	lst half 2nd ,.	8:37 9 10	11:82 13:99	48:38 37:45	7·64 8·27	13.55 17.32	9·78 13·55	6·11 7 48	11.9a 9.91	10:31 11:80	31·08 28·62
81	Average profit on working a coaching train one mile	1st half 2nd ,,	2·14 1·70	1.76 1.76	0·85 0·87	2·34 2·04	1·28 0·89	2·27 1·22	2·:8 1·80	1·25 1·23	1·55 1·18	0·02 0·61
82	ing vohiale one mile-	1st half 2nd ,	0.28 -4.20	1·73 -5·41	-14:31 -10:83	5 87 3.61	-6.08 -7.37	0.66 - 9.57	1·31 5·70	-7·51	-0:34 -9:03	-12.01 -13.08
<sub>#</sub> 83	la.,	lat balf	3·13 2·77	5·14 1·27	-10.00 -7.92	2·44 3·64	0°84 1°10	4·06 -4·23	14:66 7:89	-579 -3'36	-0.74 0.23	-13°93 -14°49
81		1st half	6·22 7·09	21·03 12·46	-4·38 -1·15	19·53 17·00	24·47 20·98	28·41 80·55	h r	7·52 10·18	7·78 4·84	-18.08 -15.27
85	1	ist half	41·47 27·45	30·74 25·93	25·30 21·43	42.04 81.44	29.06 20.20	37.95 23.96	35·95 27·69	27·22 24·04	42·47 88·49	19·51 14·75
66	0.1 1.1	let half 2nd ,,	53·58 54·96	28.65 21.47	5·25 18·41	39·91 37·87	27·76 22·12	47·24 87·81	85·84 50·16	85·08 40·54	47·17 25·42	5·77 7·97
	1	Jan.,	JE 20	97.81	10.41	3,91	44.1	07 01	1. 50 10	1	27.22	1.81

DIX 18—continued.

# system during each half-year of 1906—contd.

do not prepare these statistics.

						3′ 3]″		· · · · · · · · · · · · · · · · · · ·					2′ 6″		GAUGE.	1
12 a) & (b)	(a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (r)	2 (g) to (m)	29 (a) & (b)	21 (a) to (f)	22 (a)to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (6)	Number	
Bengal and North- West- ern.	Bhav- nagar- Gondal- Juna- gad-Por- bandar.	Burma.	Eastern Bengal.	Hyder- abad- Goda- vari Valley.	Jodh- pur- Bika- ner.	Rajpu- tana- Malwa.	Rohil- kund and Ku- maon.	South Indian.	South- ern Mah- ratta.	Udai- pur- Chitor.	Jubbul- pore- Goudia exten- sion.	Kalka- Sımla.	Khushal- garh-Ko- hat-Thal and Now- shera- Durgai.	Raipur- Dhamtari	Calendar year 1906 by half- years.	1 2
•											₹5				,	
20,269 21,601	3,242 2,410	15,255 15,809	10,556 9,497	6,202 6,110	3,451 2,809	28,623 25,381	4,041 8,392	11,589 14,387	11,601 11,615	269 297	166 230	470 476	433 581	38 39	Jst half 2nd "	}61
28,151 29,425	5,640 4,856	31,663 32,566	9,271 9,607	8.101 8,173	4,199 2,783	27,722 29,178	3,759 7,861	16,991 17,763	17,486 18,650	345 262	199 191	637 563	433 566	38 39	Ist half 2ud ,,	}62
<b>49,447</b> 50,653	5,275 5,564	•••	27,681 20,663	 •	11,269 11,497	27,854 30,582	3,780 6,598	 	:	153 679	133 128		1,418 1,247	][	1st half 2nd ,,	}63
302,082 30 <b>5,</b> 955	74,206 70,871	4:0,747 464,800	210,408 229,078	89,179 84,716	111,294 117,893	818,284 868,551	93,927 169,833	555,010 5"0,891	370,790 362,730	9,752 7,727	31,139 34,958	3,817 3,707	11,468 15,306	3,896	ist half 2nd ,	}64
1,294 1,593	494 510	3,418 2,558	5.108 4,669	715 652	3,874 4,416	8,902 8,509	294 5,190	5,081 5,253	3,947 <b>3,40</b> 2	25 32	, 149	298 313	111 312	11 10	lst half 2nd "	}65
2·25 1·94	5:84 7:87	9:49 8 32	5·49 6·79	2·63 2 90	8·96 7·67	5:68 4:06	3·60 1 90	10:71 7:24	8 23 8 57	10·66 6·87	22:33 16:76	22·00 26·23	12·76	13·65 7·31	lst half 2nd "	}66
4·29 4·50	21:88 25:26	11 51 10 32	17 <sup>-</sup> 54 12 <sup>-</sup> 15	22:96 23:04	17.91 29.84	1 4 (2 14·59	25 96 13:01	36·72 24·87	21·57 19 30	19:54 20:12	40 50 41 81	29·78 36·67	19°29 17°28	15 43 15 17	1st half 2nd	}67
10·08 11·05	26.62 26.03		27 <sup>.</sup> 91 . 29 <sup>.</sup> 45	· ··	17 72 19:66	36 79 33 53	10 71 7:14			4·43 9·68	47·13 40·34		5·36 3 95 ,	39.94	ist half	<b>}</b> 68
47·03 44·25	55.61 52.50	49·56 28 74	54·57 58 80	46°85 43°92	47·41 46·72	46.97 42.96	40·90 21 87	62·18 56·37	16·50 43·74	66.18 66.81	50 58 38 78	43·92 45·07	69·15 59·48	88-91	lst half 2nd ,,	}69
58·24 60·55	48 78 35 59	26:87 37:83	14.67 22.36	34·19 28·62	6·41 9 10	38 71 31 57	57.07 , 3.41	17:0° 16:23	34 13 32·70	167·56 113·02	48:48 27:03	16:48 16:64	21 88 8·50	63 05 55 83	let balf 2nd ,,	}70
18,182 17,586	2,020 2,618	14,835 12,164	8,237 9,6 <b>4</b> 3	2,9 <b>2</b> 5 2,571	3,702 3,930	27,119 26,961	2,591 2,532	22,289 20,615	12,110 11,020	408 856	1,000 867	175 182	520 599	112 97	lsthalf 2nd ,.	71
218,403 241,165	27,026 26,787	186,842 198,300	88,574 94,696	31,977 31,316	46,312 49,876	28 <b>6,</b> 896 316,934	31,010 <b>51</b> ,641	180,292 189,643	146.0; 5 143,963	3,594 3,330	9.781 11,290	2,687 2,550	3,977 5,069	6 <b>75</b> 6 <b>8</b> 5	let half 2nd "	}72
236,585 358,701	29,946 29,855	201,677 210,462	96,811 104,341	34,902 31,487	50,094 53,806	314.015 343,895	33,001 57,173	202,581 210,258	1.8,165 151,988	4,032 3,686	10,781 12,157	2,862 2,732	4,497 5,658	787 762	1st half 2nd ",	} 73
11·40 12·88	15:42 14:33	14 82 11 83	12·91 13·84	9:42 8:34	13:87 13:02	13·89 13·49	14:96 12:19	19·13 16·78	12·17 11·07	25:61 13:31	20:20 14:58	5:06 5:98	6·85 6·10	10:42 7:96	1st half 2nd .,	}74
172·96 191·75	142·75 146·33	186 62 192 92	138:86 135:78	103.63 103.48	173·73 165 23	148°09 158°51	179.06 262 95	154:77 154:36	146:80 144 64	210°47 124 43	197:43 189:86	77.62 83.70	52:34 55 <b>9</b> 1	62:75 <b>54</b> :35	ist half 2nd ,,	}75
187·36 204·63	158·17 160·66	201·44 204·75	151.77 149.62	112.45 111.82	187:60 178:25	161:97 172:00	191·02 275·14	173·90 171·14	158 97 155:71	236.68 137.74	217:63 204:44	82·68 89·68	59 19 62:41	73·17 62·31	1st half 2nd ,,	<b>}</b> 76
0·91 101		1.68 1.80	1.69 1.28	1·51 1·65	1:06 1:44	1·15 1·21	1 91 1 97	1·62 1·40	1·16 1·37	1·91 1·52	1:83 1:57	2:56 3:73	1:30 1:11	0·71 0 75	let half 2nd ,,	}77
8 14 9 68		16·57 17·76	18:48 14:58	21·46 24·18	10·94 15·85	12 22 10:27	13·82 21·36	16.60 14.68	13:98 17:03	15:89 22:40	11:83 10:68	56:85 69:08	29·73 22·30	9·31 12·30	lat half 2nd .,	}78
0·74 0·07	1·10 1·28	1:34 1:84	1·51 1·05	1·16 1·42	0·91 1·33	0.93 1.10	1:06 1:04	0.03 - 0.03	1°13 1°47	0·98 1·42	t 05 1 25	6·53	2·17 1 88	0·80 1·10	1st half 2nd ,,	}79
5·09 4·85		16·79 16·44	25°21 20°33	12·95 18·06	10·85 14·92	7:90 9:00	5:10 19:52	37:61 33:58	15:28 19:17	4 05 7 10	11 <sup>-27</sup> 16 89	85.04 106.12	44·82 88·23	11 45 16:76	let balf 2nd ,.	}80
1·68 1·27		2·25 1·32	1·25 1·94	1.88 0.98	1.07 1.07	1·57 1·20	1·88 0·70	1.81 1.43	1 23 0 81	2·82 0·92	1·85 1·10	3·40 3·51	0·13 0·23	2·05 1·35	1st half 2nd ,	}81
5·47 7·44	-8.78	-1.26 -4.84	-9·87 -4·15	-1577 -17:85	-0·11 -6·50	-4·41 -7·55	-0.80 -9.89	-5.57 -6.25	-3·62 -6·34	7·19 -9·20	-2·98 -2·87	108·18 100:36	-11·18 - 5·76	3:31 5:85	1st half 2nd ,,	}82
-4·26 -5·78	0.43	-1·19 -4·16	-4:36 -0:60	2·21 1·95	2°49 -0°83	-1·33 -1·83	15.60 5.72	2·13 0·89	1.74 -2.74	5·17 - 0·72	- 2·10 -2·48	106·26 102·00	15·88 8·65	-1.08 -5.56	lat half 2nd "	}83
-1·29 -1·90	1.32		-2.63 8.87	:::	1.71 -1.41	15·37 12·01	-3·49 -8·10	:::		-1371 -14.36	-4:56 -4:19		- 25·06 18·95	28.74	1st balf 2nd ,	}84
15.08 15.08	26.07	27·87 16·87	21·60 28·87	28:37 22:05	19·87 14·39	18·75 15·03	21°31 8°88	24·89 22·07	17·16 12·45	22.90 16.29	18·40 8 72	59:00 44:50		24.70	1st half 2nd ,	}83
68·10		15.85 19.95	15.98 43.34	42.88 31.59	32·46 80 20	42·12 32·63	157·55 56·42	4·32 6·16	28·26 24 83	222.88 128.66	28 17 12 63	77:63 68:08	9·53 <b>⊷</b> 8·94	39·61 25·72	1st half 2nd ,,	}86

#### APPEN

# Analysis of working of each railway

Norn.-Railways not shown

		GAUGE.					5	6"		<del></del>		
ä		Num- ber.	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	(a) to (f)	6 (a) to (d)	(a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
Serial number	Particulars.	Calen- dar year 1966 by half- years.		Bom- bay,	Eastern Bengal.	East Indian.	Great. Indian Peninsula.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Oudh and Bohil- kund.	Assam- Bengal.
V	COACHING TRAFFIC—concld. COST OF WORKING AND PROFITS— concld. Average profit on working a coaching	•					*					*
87	unit one mile - Per passenger unit Pies {	1st half 2nd "	1:67 1:36	1·20 1·04	0.93 0.93	1.63 1.49	1 11 0.85	1·37 0·83	1·47 1·29	1 16 1 15	1·49 1·27	0.95 0.7 <b>0</b>
88	Other traffic per ton ,, {	1st half 2nd .,	31·71 30 76	18·05 14·66	-1.89 11.76	22.85 23.03	20.80 19.78	26:31 22:30	36·12 27·98	23·54 24·21	30·37	11·75 13·95
	GOODS TRAFFIC. GROSS RECEIPTS AND TRAIN MILEAGE. (In thousands.)											
89	Receipts from goods traffic . Rs {	1st half 2nd .,	91,07 77,17	86,37 59,90	25,94 57,65	2,86,86 2,75,19	2,56,89 1,86,09	66,41 61,20	18,84 15,98	2,29,81 2,28,55	41,24 36,02	8,57 13,83
90	Goods train-miles ruu No. {	lst half 2nd "	1,865 1,781	783 616	608 816	4,917 4,871	4,527 3,690	1,439 1,355	410 831	4,954 4,884	1,05 <b>2</b> 9 <b>4</b> 7	464 513
91	Average goods receipts per train-mile	1st half 2nd .,	5:01 4:33	11:03 9:72	4·28 7·06	5:80 5:65	5·68 5·04	4·62 4·52	4·60 4·83	4·64 4·68	3·92 5·80	1·85 2·70
92	Units and unit-Mileage. (In thousands.) Tons of goods carried one Ton- mile	Ist half 2nd ,.	368,659 <b>310,950</b>	233 263 169,964		1,356,224 1,318,328		201,870 183,271	61,676 52,158	982,398 984,483	164,297 144,723	35,095 52,488
93	Average sum received for carrying aton one mile . Pies	1st half 2nd	4·90 4 77	7 11 6:77	1·80 7·85	4.06 4.01	6.46 6.59	6:32 6:41	5·86 5·88	4·49 4·46	4·82 4·78	4·69 5·03
94	Average number of tons in a train	1st half 2nd .,	197 65 174 57	298:00 275 74	171·11 172·78	274 13 270:64	168·77 153·69	140·29 135·27	119·12 113·93	198·32 201·59	156·22 152·85	75·58 102·35
	VEHICLES AND VEHICLE-MILEAGE - Number of goods vehicles hauled one mile- (In thousands.)	1.4 116	94.150	26,381	10.015	121,180	91 009	25 510		01 505		
95	Loaded Vehicle-miles	1st half 2nd ,,	29,813	20,005	10,617 13,048	120,506	85,298 68,729	25,512 23,799	5,576 4,482	91,597 92, <b>021</b>	22,345 18,346	5,993 8,135
96	Empty ,, {	1st half 2nd	14,930	6,175 <b>4,</b> 825	3,077 4,149	62,033 59,288	25,495 19,173	9,359 9,070	3,298 2,555	26,510 25,764	6,050 5,607	2,204 2,028
97	Brake-vans " {	lat half	3,268 2,911	714 541	607 784	5,058 5,309	9,315 7,040	2,539 2,383	761 567	4,985 4,859	950 814	492 567
98	Average number of vehicles in a goods train—	let half 2nd ,,	51,076 47,684	33,270 25,591	14,301 18,281	188,271 185,053	120,108 94,942	37,410 85,152	9.635 7,554	123,092 122,644	29,345 21,767	8,689 10,725
99	Freight vohicles No. {	let half 2nd ,,	27·24 25·12	41·59 40·23	22 60 21 43	37:04 86:90	24·17 23·82	21·21 24·26	17·14 15·26	23 84 24 12	27.00 25.30	17·65 19·81
100	Brake-vans ,, {	1st half 2nd ,.	1·75 1 65	0.81 0.81	1·00 0·96	1.09	2·06 1·91	1·76 1·69	1·47 1·24	1.00 1.01	0.86 0.80	1·10 1·06
101	Total ,, {	1st half 2nd ,,	28·99 26·77	42 50 41 · 19	23 60 22:39	38°06 37°99	26:53 25:73	26:00 25:95	18·61 16·50	24·85 25·12	27:10 26:16	18·71 20·91
102	Average earnings per goods vehicle per mile (excluding brakes)	1st half	35:55 33:12	50 94 46 31	36:37 60 51	30 06 29 40	44:52 40:65	36·56 35·75	40·76 43·91	37·36 37·26	27·89 28·88	20·08 26·15
108	Carrying capacity hauled one { mile (excluding brakes) . Tons {	1st half 2nd ,.	816,535 728, <b>63</b> 4	445,527 341,076	184,159 234,874	2,682,437 2,689,275	1,592,679 1,269,302	499,034 472,153	134,193 108,080	1,812,853 1,859,875	361,747 311,366	77,824 95 <b>,92</b> 2
104	Percentage of freight upon Per { capacity hauled cent. }	1st half 2nd "	45°14 42°68	52 36 19 83	56 81 60 06	50·56 49·02	47 97 44 74	40·45 38·82	45 96 48 26	54·19 52·93	45·42 46·48	45·10 54·72
<b>1</b> 05	Average load of a goods vehi- cle (including both loaded and empty) per mile Tons {	1st half 2nd "	7:26 6 94	7·17 6·85	7·57 8·06	7·40 7·83	6·90 6·46	5·79 5·58	6·95 7· <b>4</b> 7	6:82 8:36	5:79 6:04	4·28 5·17
106	Average load of a loaded goods vehicle per mile . ,, {	1st half 2nd ,.	10.66 10.43	8:84 8:50	9·77 10·81	11·19 10·94	8·96 8·26	7·91 7·70	11·06 11·77	10·73 10·70	7·35 7·89	5·86 6· <b>4\$</b>
	WEIGHT OF TRAIN AND TON- MILEAGE— Gross ton-mileage of all goods trains— (In thousands.)											,
107	Freight Tons	2nd	368,659 310,950	169,964	141,073	1,356,224 1,318,328	567,880	201,870 183,271	61,676 52,1 <b>58</b>		144,728	35, <b>09</b> 5 52,488
108	Dead weight ,, {		533,083 474,796	279,494 216,447	151,281 196,828	1,723,976 1,696,745	1,246,951 997,125	369,852 <b>34</b> 8, <b>44</b> 3		1,228,235 1,246,383		58.6 <b>89</b> 70 <b>,589</b>
109	Total ,, {		901,692 78 <b>5,74</b> 6			3,080,200 3,015,068		571,222 581,714	164,364 138,648	2,210,633 2,230,866	439,362 (885,919	93,784 1 <b>28,027</b>

DIX 18—continued.

#### system during each half-year of 1906—contd.

do not prepare these statistics.

10	1 14	1			3′8‡″	2	20		1				′ 6″ 		CAUGE.	
12 1) & (b)	(a) to (d)	15 (a)	(b) & (c)	8 (c)	(a) to (c)	(g) to (m)	(a) & (b)	(a) to (f	(a) to $(j)$	23 (a)	1 (b)	30 (a)	9( h) & (i)	1 (*)	Number.	
Bengal and North West- ern.	Blav- uagar- Gondal- Juna- uad-Por- bandar.	Barns.	Eastern Bengul	Hyder- abad- Godi- vari Valley,	Jodh-	Raj- putana- Malwa.	Rohil- kund and Ku- maon.	South Indian.	South- ern Mali- ratia.	Udaipur Chitor	Jupperl.	Kalka- Simla,	Khushal- garh- Kohat- Thal and Nowshere Durgai.	Raipur- Dham- tari.	Calendar year 1906 by half- years,	
٠,											•					
1:31	1.81	1 22	1.13	0.84	1.58	1.19	131	1.17	1-11	1.21	1.02	6 37	0.19	2:28	1st half	
1·08	1.24 89.08	1 0 18 02 20 02	1.61	0 77 27 58	0:87 31:41	1.02 22.94	53 91	1·20 13 00	29:18	3 71 31 57	0 83 33 88	5 39 119 61	0:52 8:81	1:96 33:92	2nd ,	}87
84 33	35'- 6	20 02	28.91	25.79	27:10	18 69	11 65	16 50	25 33	26 31	30 43	99.04	-35:33	28:64	2nd .,	88
						·						•				
41,81 36,47	5,76 3,25	46,10 36,37	25,53 31,27	12 27 6,90	14,94 10,18	1,00,32 75,39	7,00 5,13	31,61 31,06	4º,17 32,95	9°	9.14 1,87	1,47 1,81	73 •\5	3 <b>8</b> 21	1st haif 2nd "	} 89
1,228 1,185	144 92	1,554 1,594	617 683	852 229	397 <b>3</b> 35	2 328 1,953	2,19 1,73	1,103 1,171	1.51 <b>6</b> 1,368	11 9	98 001	• 33 44	110 130	20 18	ist half 2nd .,	}90
3.71	3.99 3.22	2·97 2·37	4 16 4:18	8 70 3 02	3 77 3:04	3.86	3·19 2·97	2·65	2:71 2:53	5 49 4 . 9	9·19 1·72	1·21 1 08	0·ť2 0 66	1 ' 4 1 15	1 t half 2nd ,	}91
149,127 123,658	11,719 6 <b>9</b> 59	1 9,113 1.2.0:3	55,456 27,326	26,065 15,010	42,700 28,536	- 09,618 254,291	19, <b>784</b> 17,415	86,550 83,978	132,010 101,648	693	5 669	666	1,004	758	1st half	200
5 38 5:66	9 43 8 95	6 °4 5 72	8 90 7 76	ที่ 0 เ 8 ธ1	6 71 6 85	6:22 5 69	6:80 5:65	7 01 6:70	6 18 6 22	471	7,152	1,014 42.21	1,825 8:61	802 9 67	2nd , 1st half	}92
191 43 103 93	81 25 75 47	83°26 79.54	89 24 113 · · 6	38.00 13.45	107 79 85:14	1°2'''6	90°26 100°94	78 41 75.07	9181 7/70	63 93 54 06	5 03 57 90 65 62	34 23 2 13 12 86	8 97 13 56	671 38 51	2nd " lathalf	}98
													14.05	#2 F9	and "	}94
25 486 22,327	2,778 1,738	25,704 24,606	12,930 12,959	4 0°5 2,787	6,38 <b>4</b> 5,53 <b>8</b>	: 6,048 45,712	3,112 2,417	17,371 17,841	26,351 21 279	176	1,545	183	705	202	ist helf	200
9,701 11,148	1,292 726	10,091 9,735	2 2 4 2,215	1,858	2,81 <b>8</b> 2,491	18,959 15,018	1,750	5 697 6,831	8,8-1 6,537	128 161	1,574 543	250 104	716 266	129	2nd ,, 1st_half	}95
1,661 1;591	127 48	2,92 <b>4</b> 3,23 <b>4</b>	621 713	6°1 4-4	106 90	2,114 1,592	66 261	1,3::0 1,578	1 932		83a 97 1e6	 	274 183 144	74 20	2nd ,, 1st balf	}96 }97
86,618 35,066	4.197 2,513	38,022 36,575	15.835 15,692	6,611 4.::37	9,103 8,119	77.4:0 62 662	4 957 3.897	24,31.8 26,251	17,164 29,740	2·0 187	2 1·5 2,518	2×7 3c9	1.174	23 332 2 6	2nd ,, let half 2nd ,,	} #8
28:49	28-22	27-03	21.66	12.09	23-18	82-21	22 22	20:91	22.61	25 74	21 33	8:08	8 87	17.54		
20·49 1·85	26·72 0 83	22 39 1·43	22·23 1 01	9:76 1 40	13.95 0 27	31·11 1·05	21 07 0:39	21·(6 1·20	21 26	21.87	22 17 6:90	6.96	7.62	15:74 11:11 1:15	1st half 2nd ,,	}99
1.40	0.52	1:46	1 05	1.22	0.27	0 97	1.2	1:35	1 32		0 97	•••	1:18 1:11	1 23	lst half 2nd "	}100
29:44 30:69	29·10 27·24	21 16 23:64	2:27	13 49 10 98	23 45 24 92	33 25 32 08	22·61 22·59	22°11 22°11	22.28	25 74 21 <b>37</b>	23 32 23 10	8 68 6 96	9 95 8 73	16 89 12 31	let half 2nd	}101
22 94 20 92	27 16 25 29	24.73 20.31	92 22 37:17	89 53 24 40	21·19 24 33	25 08 23 83	27 60 27 08	26 31 24 17	23 15 22 74	40 92 58 63	19 67 14:12	97 83 112:39	14 26 16 53	23 ¢5 19 87	ist half	102
345,625 330,279	39 364 18,406	290,152 278,265	181 645 134,5~4	64,810 40 735	88,096 75,186	657,219 5.6,50	55 482 41,723	170,0 .1 184,567	260,811 256,158	2,261 1,50a	16,775 19,370	2,050 4,310	4,340 4,426	2,274 1,4%	14t half 2nd "	} 103
43·15 37·44	98·50 37 81	41.60 43.85	45;26 57 <b>46</b>	40 67 36:92	48 05 36.41	47:11 47:37	35 66 41 74	50°-9 48°21	50 61 40 30	29 42 31 43	:3 79 36:92	32:63 48 92	87·05 41·24	33·61 40 67	lat half 2nd "	}104
4·26 3·69	2·88 2·82	8·62 3 55	3·62 5 10	4 88 3 90	4·65 3·55	4·12. 4·18	4·08 4·79	8·75 3·61	3·75 3·65	2 48 2·53	2·72 2·97	2 32 3 28	1 66 1 84	2·15 2·96	ist half and "	}105
5.90 5.51	4·22 4·(0	5:03 4:96	4·26 5·97	6 37 5 89	6.70 5:15	5·5 ! 5 56	6·36 7·21	4 98 4 99	5:01 4:78	3·96 3 67	3·67 4·51	3 64 4 07	2·28 2 55	3·75 4·65	1st half 2nd ,	} } }
											<u> </u>					
149,127	11,718		58,256 77,27	26,065	42,560	309,618	19,784	86,5:0	132,010	<b>69</b> 6	600,669	666	1,693	757	ist half	  -
128,658	0,959 19.358	122,038 221,120	89,278	15 040 41,871	23,537 49,790	254,291 356,209	17,415	88,979	101,618	474 1,489	7,152 12,546	1,014	1,825	602 - 1,418	2nd ,	} 107
179,070 323,292	<u> </u>	216,586	99,062	28,875	49 118	-92,203	21,451	158,430	160,961	1,0~5	14,692	2,788	5,201	1,0.8	2nd y	<b>}108</b>
208,728	31.076 18,753	350 531 838,619	141,829	67,486 43,418	92,850 71,655	f65,827 510,191	45,877 38,860	221,608 247,409	32 ',941 264,609	2,185 1,539	18.516 21,841	2,995 3,750	6,562 7,126	2.175 1,610	1st half 2nd ,	3 109

APPEN

## Analysis of working of each railway

Nore.—Railways not shown

		GAUUR					5' 6"	···	<del></del>			ı
i.	_	Number	1 (a)	(a) to (f)	3 (a)	(a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (n) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
Serial number.	PARTICULARS.	Calon- dar year 1906 by half- years.	Dan	Bombay. Baroda and Central India.	Eastern Bengal.		Great Indian Peninsula.	Madras.	Nizam's Guaran- tood State.	North West- orn,	Oudh and Robit- khand.	Assam- Bengal,
	GOODS TRAFFIC-concld.	4	ľ									
	WEIGHT OF TRAIN AND TON- MILEAGE -concld.											
	Average weight of a goods train-						۶.					
110	Froight Tons	1st balf 2nd ,,	197:65 174:57	298:00 275:74	171 11 172 78	274·13 270·64	168·77 153·88	140·99 185 27	119·12 113 93	194:32 201:59	156-22 152-85	75:58 103:35
111	Dead weight , , {	lst half 2nd "	285:78 266:55	357:06 351:14	249·63 241·07	318·17 348·32	275:47 270:23	256·69 257·19	198:31 177:99	247 95 255 22	261 55 254 74	126·89· 137·54
112	Total	1st Mili	153 43 441 12	755:06 726 88	420.74 413 : 5	622 60	444·24 424·11	392.10	317:16	416.27	417.77	201:97
	Cost of Working and Proper.	l					42771	002 10	291 92	456 81	407.59	280 69
113	Average cost of hauling a goods train one mile . Rs.	1st half 2nd .,	2°19 3°24	4·17 4·52	3·24 2·91	2·27 2·28	2·45 2·51	2 55 8 27	1.74 1.76	2·50 2·87	2·02 2·01	2·22 2·50
114	Average cost of hauling a goods vehicle with its lead one mile	Ist half 2nd ,,	15:41 17:13	20 65 21 52	27·55 26·12	11 76 11 84	19·20 20·21	20·22 25·86	15 39 16:03	20°13 18°86	14·39 15·27	24 20 24-23
115	Average cost of hauling a goods unit (viz., one ton) one mile	1st balf 2nd .,	2·12 2·46	2.88 3.11	3·64 3·21	1·59 1·61	2·78 3·13	8·49 4.61	2·21 2·15	2·42 2·26	2·49 2·53	5·65
115 A	Average cost of hauling a goods unit one mile, includ-								119,	2 20	200	4.69
	ing interest on capital ex- pended on open line at the rate of 5 per cent, per	let half		4.69	6 46	2.97	4.87	6-82	4:95	4.52	5.03	12:07
116	Average profit on working a goods train one mile . Rs.	2nd ,	i .	5 70 6:56 5:10	5·42 1·04 4·15	3·53	5·67	8 32 2·07	5·15 2·86	4·32 2·14	5·24 1 90	9.30
117	Average profit on working	1st half	l	30-29	8.83	3·37 18·30	2°53 25°32	1.25	3·07 25·87	2 31	1 79	0.50
118	load one mile Pies \ Average profit on working	2nd "	1549	24.79	34.42	17.56	20.41	9.89	27 88	17·29 18·40	13.20 13.61	-4·13 1·92
	a goods unit (ris., one ton) one mile	1st half 2nd "	2:74	4 23 3·63	1 16 4 f 1	2.40	3·68 3·16	2·83 1·77	3·65 3·73	2·(·7 2·20	2·03 2·25	-0.58 0.34
*	DETAILED PERCENTAGES OF EARN- (NOS AND EXPENDITURE.				•							
	Percentage on Total Earnings-	104 1.15	30.08	21.67	10.00	00.01		<b>45</b> - 54				
119	Cosoning traffic . Per cent. $\{$	1	31.91	31 07 37 80	46 2·1 30·05	30·81 29 94	27·29 32 70	37·52 37·16	23·37 23·47	30·50 31·69	47·37 46·10	47·13 34·76
120	Goods traffic ,, {	1st half 2nd .,	6134	67 77 60 : 9	46 83 67·25	67·65 69·45	71·57 65·58	60 08 59-21	72 96 70 97	67·92 66·52	46·04 45·93	46 83 88:38
121	Sundries, including telegraph	1st half 2nd "	3.24	1·16 1·61	6·88 2·70	1·24 1·26	1·14 1·42	2·40 3·63	3·67 5·56	1·58 1·79	6·59 7·97	5·94 6·33
122	Steam-boat carnings " {	1st half 2nd ,	0·39 0·51			0·30 0 35			:::	<b>:-:</b>	 	0.60 0.60
	Total , {	1st half 2nd "	100.00	100 00 100 00	100.00	100.00	100 00 100 00	100.00	100.00	100.00	100.00	100.00
	Percentage of Working Expenses on Total Earnings—				•		`					
123	Maintonance Fercent. {	1st half 2nd ,	7:90 11:42	8:52 16:87	22·48 12·94	9·10 9·56	10·27 9·96	12·70 21·58	12·13 11·09	14·22 12·97	11·77 14·68	92·71 27·99
124	Locomotive expenses . " {	lst half 2nd "	13:82 15:75	17:83 20:18	17·29 12·13	10·12 10·68	19:32 23:23	18:62 29:12	10·48 10 92	24·14 22·12	17.50	21.55
125	Carriage and wagon ex-	lst half 2nd "	4·22 4·75	5:76 5:19	5·74 3·72	4·f/8 4·55	4·26 5·42	5·51 7·02	.8·28 8 32	3-6n 3-40	18·42 3·77	20·60 6·86
126	Тгабо охропнен . , " {	1st half 2nd "	7·74 9•43	6°48 7 85	18·04 14·62	8·01 9·00	7·12 9·28	7·58 7·92	5·88 6·16	7:36 7:97	3·17 9·81 10·94	12·50 12·48
127	General charges , {	1st half 2nd ,	4·58 5·88	4·00 5·02	ა∙84 4°30	3 28 3 68	3·50 4·85	4·60 5·32	4·76 5·50	2·88 2·88	4·18 4·76	14·81 11·68
128	Miscellaneous expenses y. ,, {	lat half 2nd ,,	2·88 3·82	1·42 1·74	2·69 2·87	2·17 2·28	1·79 2·50	1.83	1 86	1.38	2·92 3·13	5·21 7·10
. 129	Steam-boat expenses . ,, {	1st half 2nd "	1·04 1·40	:::		0·21 0·84			:::	0·01 0·01	::	0·81 0·42
180	TOTAL WORKING EXPENSES ,, {	let half 2nd ,	42·13 52·45	44·01 51·05	71·78 50·58	87·82 40·04	46:26 54:69	50:99 68:40	37·49 38·85	58·52 50·68	50·20 55·10	98.95
<u> </u>				·			- 1					. Y

DIX 18—continued.

system during each half-year of 1906-contd.

do not prepare these statistics.

				3' 9}"	_			*********			<u> </u>		2' 6"		GAUGE	. [
12 (a) & (b)	14 (a) to (d)	15 (a)	(b) & (r)	8 (r)	18 (a) to (c)	12 (g)to(m)	20(a) & (b	21 (a) to (f)	(a) to (j)	23 (a)	1 (6)	50 (a)	9 (à) & (1	1 (0)	Number	Serial
Bengal and North- West- ern	Bhav- nagar- Gondal Juna- gad-Por- bandar	Burma	Eastern Bougal	Hydera bad Go- dav ri Valley.	Jodh- pur- Bikaner.	Raj- putana- Malwa	Rohil- kund and Kumaon,	South Indian	South- orn Mah- ratta.	Udsipui -Chitor.	Jubbul- pore- Goodu exteu- sion,	Kalka- Simla,	Khushal- garh- Kohat- Thai and Nowsheig Durgai.	Raipur Dham-		number.
										,		* 				
121·43 105 93	81 25 75:47	83·24 79 54	89·24 113 26	52·92 38·+9	107·79 85 13	132 93 130 19	90 £6 100 94	78:44 70 97	81:F2 77:70	62:93 54:06	57 90 65 62	20°12 12 86	13 86 14 05	38 51 52 69	lst half 2nd ,	110
141:81 157:74	134·22 127·90	142°26 141°16	114:71 145:10	85 (°0 71 · 83	125·51 128·64	152:99 149:61	116:75 124:34	131:46 1/5:27	127·17 123·04	136-88 121-60	101:22 134 %	70°34 61°66	42.71 40 05	72:(6 56:71	ist half 2nd ,,	}111
263·21 266·67	215·17 203 37	225·52 220 70	223 95 255 36	137 92 109 97	233°30 213 77	185:97 219:80	201°01 225 28	209 20 211 24	211 (9) 2( <b>0</b> :74	200:81 175:66	189 12 200 42	90°16 84°52	56.57 51.10	110:57 8::60	lst half	}112
1·27 1·46	1 89 2 07	1.89 1.94	2·61 2·21	1:65 1:70	1·32 1·73	1·89 1 97	1:39 1:62	1:95 1:73	1:55 1:76	1:63 1:95	1.59 1.51	2 80 3 51	1·24 0·96	1:08 1:08	1st half 2nd ,	}113
8·57 9·51	17 89 17-61	15 <sup>.</sup> 72 16 <sup>.</sup> 67	20·35 19·07	17·71 19·35	10 90 13.83	11 24 12·17	12 05 14:73	.17·91 15·76	13 11 15 93	12·17 17 45	14 30 13:34:	62 00 96 81	28:38 24:29	13 15 18:70	1st half 2nd ,,	}114
2·01 2·57	4·16 5·27	4·85 4·60	5·62 3·74	4·05 4·96	2 34 3 89	2·72 2·91	2 97 3·07	4·77 4·37	3 50 4 36	4 90 6 90	5 27 4 50	26:76 29:49	17·14 13·18	5:37 6 ::2	1st half 2nd ,,	l
			•						•				1			•
4·28 5·18	9·17 11·36	7·55 8·05	9·44 7·88	7·30 9·75	3·91 5 97	4·87 4·75	5 72 5 33	8·02 7·62	6 79 8 35	19·18 27·94	11 95 10-03	91.74 71.14	32 40 25 72	11·96 14 04		A.
2·13 1·75	2·10 1·45	1.08 0. <b>43</b>	1·55 2·97	2·05 1·32	2·45 1·31	2 42 1 89	1·80 1·35	0·92	1·18 0 76	3·86 2·34	0.18 0.00	1·62 0·57	-0 62 -0 30	0 86 0.07	1st half 2nd ,,	
14:87 11:41	14·32 10·40	9·01 3 67	11·87 18 70	21·87 15·05	20 20 10 50	14·44 11·65	15·55 12 35	8:40 8 41	6 81	28 75 21·18	5.37 1.58	35184 15155	-14:12 -7:76		1s: half 2nd	
3·37 3·09	4·97 3·68	2:49 1:03	3·29 4·02	4·99 3 85	4·37 2 96	3·50 2·78	\$ 83 2 58	2·21 2·33	2 68	11.58 8 37	1:08 0:53	15 45 4:71	-8·53 -4 21	4 30 0 39	lst half	}118
							•								•	•
41·53 43·75	54·88 64·72	45·25 45·55	88:00 37 70	29 90 40 19	31·43 41·61	32·37 38·07	41 88 45 61	55·12 54·82	35·46 39·06	56·64 62 32	14·76 45·64	57:76 54:39	59:36 £8:14		lst half 2nd "	,
49-28 48-32	43·41 32 04	52.98 51 74	52.82 52.48	67·72 56·59	66:21 55:94	66·23 59·66	53·14 44·92	42:73 43:94	60-23 50-22	41·85 35·90	52 56 53:11	10:81 44:59	39.74   40.84		1st half 2nd "	,
2·49 1·78	1·71 3·24	1·4·2 2·30	0 92 0 95	2·38 3·22	2·36 2·45	1.40 2.27	4·98 6·14	1·85 1·74	1 72 1 72	1:51 1:78	2.68 1.85	1.02	0.50	1	lut half	,
6·70 6·15	:::	0·35 0·41	7:36 8:87		:::	:::	:::		:-	:::	٠.	:::		·	1st balf 2nd ,,	}122
100.00	100.00 100.00	100 00 100 00	100.00	100.00 100.00	100.00 100.00	100.00	100.00 100.00	100 00 100 00		100.00 100.00	100.00	100.00		100.00	1st half 2nd	
					ł	Ţ	•			l						
12:30 16:37	11.77 14.87	14·45 20 78	16·47 13 03	21·05 20·26	8·69 21·92	8 52 10 91	6·72 9·43	17 <sup>-</sup> 22 13 <sup>-</sup> 38	12·15 17·57	937 2357	17·24 19·20	9·01 17·86	46·13 31·54	10°19 13 70	1st half and "	}123
9·71 11·86	11:40 12:45	18 69 25 24	9.60	10 50 14 28	15.59 19.85	17 84 20 27	14·51 15·02	₹20·09 20·38	20·46 24·83	12·12 15·59	19 07 22 E0	20·57 22·90	40.55 34.71	15 44 17 29	1st half 2nd ,	}124
3·19 3·19	2·62 4·14	5·00 5·81	8·34 8·69	1·71 2·51	2·01 2·59	5·76 5·42	5·68 5·01	3·90 5·07	4·95 5·60	1 89 2·54	3:37 1:01	1.65 2.87	8·28 5·35	3:32	1et half 2nd ,,	} 125
6.98 7.72	7·82 8·64	8·64 10·52	3.88 3.81	6.76 10.00	5·19 6·71	6·48 7·88	7:49 8:78	7.61 7.68	7·56 9·09	6·F9 7·91	12:01 15:80	8 72 13·24	22 37 21 19	7.70	1st half 2nd .,	} 126
4·84 5·05	7·40 9·82	5·69 7·44	4 93	7·29 11·10	3·07 4·04	3·99 5·04	8.06	6'35 6 79	7·20 8 <b>69</b>	5·36 6·46	8:35 11:12	10 84 9 53	13.07 12.01	9 33	lst half 2ud ,,	} 197
0.88 1.20	1.01	2·02 1·32	2·22 1·42	0.94 2.19	2·17 2·48	1.42	1.42	1.42 1.42	1.90	1.63	1·49 2 17	0.13 1.03		0 60 0 82	let half 2nd "	<b>}</b> 128
2·97 3·62		0.80	6.09 5.18	:::				-::		:::			3 05 2.87	:::	1st hali 2nd ,,	}129
89·79 48·81	49-09 51-62	71.98	62·74 46 99	48:25 60:34	36-65 57-09	44·01 51·26	39·80 47·72	56 87 54 72	54·28 67·68	36·94 56·73	61·53 75·19	51·22 67·43	197·25 112·25	42·84 62·16	1st haif 2nd "	}130

#### APPEN

### Analysis of working of each railway

Nore.-Railways not shown

		CAUGE.					5′ 6″	<del></del>				1
Serial	Parth Glaes.	Number	1 (a)	2 (a) to (f) •	3 (a)	(a) to (d)	(") to (f)	6 (a) to	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
nomber.	LARIP UDS.	Calon- dar year 1906 by halt- Years	Bengal- Nagpur.	Boarbay, Borods and Central India	Fastern Bengal,	Enst. Indian.	Great Indian Peninsula	Madras.	Nizam's Guartn- to-d State.	North West-	Oudh and Rohil- khand.	Aseam- Bengal.
	PER MILE OF LINEAMAIN- TAINED	•	•		) 			TABL	E A1	MAINT	ENAN	CE OF
131a	General superintendence (includ-fing office expenses) . Re. }	1sthulf 2nd ,,	140-19 156-09	191°: 0 183-59	261:85 701:24	22% 59 230 <b>4</b> 9	150 48 151 93	150.69 132.39	146 03 155:54	148:82 119:54	140:44 135:41	146:78 15"-88
1324	Maintenance and renewal of permanent-way	1st half 2nd ,	251-99 354 : 1	1719/3 721/42	1,353:69 8.0 63	809:36 810:29	714:07 461-51	443.77 58.:46	233 26 295 81	613 22	303·73 457 95	411·16 434·32
133a	Repairs of bridges, &c	1st half 2nd ,	91·97 66:36	143:87 157:36	085'64 492 89	25520 174 64	215/61 165 <b>47</b>	126°06 414°63	359 10 190 72	58:98 65:37	190 05 70:87	121·47 142·56
134a	Concervancy of rivers	1st half Int ,,			5.54 0.64			:::	0.08	10 05 13 74	0 28 1.57	:::
135a	Repairs of stations and buildings,	1st half 2nd 🔏	103 36 1, 0 70		.:31·18 :3\3 46	252:20 257 35	145:33 130 00	91:26 122:93	44.62 2 \ 80	209·19 192·92	108:20 131:54	67:06 72:13
136a	Other cluryes (net)	1st half 2nd ,,	49:31 73:65	8131 85 92	16333 19 · 24	161 35 171-29	85 92 89 24	194 15 278 <b>4</b> 2	60:04 (9.91	115 17 121 41	89:00 83:83	f 1/80 17/31
1 37 a	Total maintenance, &c	1 st half 2nd		1,310 02 1,294 . 2	2 501 '2 2 227 11	1.7e6 70 1,675 06	1,311 41 1 0 0/15	995/8 <b>7</b> 1,580 83	893 13 711 78	1 264 (8 1 159 20	814 70 881 22	781:27 860 19
1315	FER MILE OF TRACK, INCLUD- ING SIDINGS. Concert superintendence (included in office exp (88%)	-11/1	119 62 132 12 217 13	127/84 (22/71 504/08	163 50 185 67 845:21	14517	107:61 108:51	12 k 48 150 61	129/83 138 28	115 65 116 08	121·63 117·53	129-95 136-21
1326	Maintenance and renewal of permanent-way ,, {	1-! [60]) 2mt .	200-10	452 2E	524-29	513 99 514 50	510 65 3): 75	100009 40097	25 08 <b>8</b> 262 90	507:63 47:42	265:64 397:47	364 03 3 s4 41
133%	Ropairs of bridges, &c	1st half 2nd ,	78:32 5. 10	9;_0 105 19	210 79 501 87	162 07 10 / 64	171/19 118/18	101·13 342 -8	319 26 159 50	15 St 10 71	161 79 61 51	107 54 126 17
1315	Consultancy of favors	1st half and ,,			3 16 0 42		••• •••		0 07	7.81 10 67	0°25 1°36	:::
1355	Repairs of stations and buddings., {	1st half 2nd ,,	59:02 110:63	90 95 95 74	203.78 136.33	160°16 182 48	103 93 92 54	75.84 101°51	26 49	162:57 143:75	93.70 114.17	59°37 03 88
1366	Other charges (net)	1st balf Jud.,	34.3] 62.35	7638 5941	101 (8	19246 110 (9	61 44 63 74	153 12 229:91	53:39 35 <b>47</b>	112.81 95.58	77 08 72 80	30 81 50 73
1375	Total manuforance, &c	Ist half 2nd .,	537140 656 50		1,361 77	1,033-78	937 82 715 02	822°67 1,305 38	79 C 65 632•. 9	58734 899.84	722 89 761 81	691 69 761:85
131¢*	FER TOTAL TOTALS.  General supernote dence (include log offen expenses)	lat halt 2nd ,,	1530 1545	131 137	1:07 1:34	0.95 0.99	0 8 1 0 91	1:36	1·14 1 73	0.03 1 co	1.07 1.11	2·10 2·26
102c	Maintenance and renewal of permanent-way	1st halt 2nd ,,	2 3 <b>7</b> 3 29	5 74 5 37	7:08 3:77	9: <b>3</b> 5	3:93 2:77	4·01 5·15	2·79	4 67 4 06	2:35 3:77	6·72 6·40
<b>1</b> 33 <i>c</i>	Repairs of bridges, &c	1-t half 2nd ,,	0·85 0·56	1 00 1 17	2 01 2 19	1 0G 0 74	1·19 0·9 <b>9</b>	1·14 3 66	3:55 2 13	0.40 0:13	1 45 0 59	1.39 2.10
134c	Conservancy of rivers	1st half 2nd ,,			0.03			:::	U.	0.08	;;; <sub>01</sub>	
1356	Repairs of stations and buildings , {	1st half 2.ad ,,	0·96 1:21	0 94 1 07	1.73 1.70	1 04 1:22	0:80 0: <b>7</b> 7	0.83 1.00	0 44 0 33	1 41 1 27	0.83 1.08	1.06 1.06
10%c	Other charges (not)	let half 2nd ,.	0-27 6-69	0 59 0 66	0.56	0.67 6.71	0°47 0°53	1.66 2.46	0·59 0 14	0.83	0.48 0.48	0:56 0:85
137c	Total maintenance, &c. ,	1st half 2:.d	5:85 7:20	9 09 13 G	13:06 9\$8	7 07	* 7:22 5:97	899 13 97	8:81 7:93	8:52 7:67	6°38 7°25	12·76 12 67
131 <i>d</i>	PER 1,000 GROSS TON MILES. General superint relence (includ- ing office expenses)	1st half 2n l "	0·20 0·25	0:20 0:22	0.27	0·12 0·12	0·14 0·17	0·25 0·31	0.25 0.80	0·18 0·17	0.53 0.55	0·77 0·65
132d	Maintenance and renewal of permanent-way	1st half 2nd ,	0.87 0.56	0 78 0 88	1 39	0 43 0 14	0.68 0.21	0 75 1.01	0·17 0·56	0·84 0·72	0.43	2·15 1·83
1334	Repairs of bridges, &c	1st half 2nd "	1	0°15 <b>0</b> °19	0 10	0.16	0·21 0·18	0·21 0 72	0.80 0.36	0.07 C 08	0.30 0.12	0.64 0.60
1844	Conscivency of rivers	1st half 2nd ,,	i		0.61		:::			0.01		
1354	Repairs of stations and buildings,. {	1×t half 2nd ,,	ł	0 11 0·17	0:34 0:33	0·13 0·15	0·14 0·14	0·15 0·21	0.07	0·25 0·23	0·17 0·23	0·25 0·30
1364	Other charges (net)	isthalf 2nd ,	0 06 0 11	0.00 0.11	0·15 0·17	0-09 °	0·10 0·08	0°81 0 48	0°10 0 08	0·18 0·15	0·14 0·15	0:17 0:24
1374	Total maintenance, &c , {	1st half 2nd ,,	0.81 1.33	1:76 1:57	2·56 1·90	0°91 0°91	1.52	1·67 2·73	1:49	1.88	1·31 1·52	4-06 8-69

DIX 18—continued.

# system during each half-year of 1906-contd.

do not prepare these statistics.

				3	<b>\$</b> ''					~			~~~~	2′ 6″		GAUGE.	
	12 (a) & (b)	14 (a) to (d)	15 (a)	(b) & (c)	8 (c)	18 (a) to (c)	(g) to(m)	20 (a) & (b)		( 22 ('n) to(j)	23 (a)	1 (6)	30 (a)	0 (h) & (i)	1 (+)	Number.	l i
	Bengal and North- West- ern.	Bhay- nagar- Gondal- Juna- gad Por- bandar.	Burma	Eastern Bengal.	Hydera. bad-Go- day.ui Valley.	Jadh- pur-Bi- kaner	Raj- putana- Malwa	Rohil- kund and Kumaca.	South Indian	South ern Mah- ratta.	Udni- pur- Chitor	Jubbul pore Gondie exten- sion.	Kalkı- Simla.	Khushal- garh- Kohat- Thal and Novshera- Durgai.		Calendar year 1906 by half- years.	Serial number
1	WAY,	WORK	8 AND	STATI													
	86·25 95·15	49·55 57·81	142°30 143°00	107:81	í	21:31 22:31	90:59 94:67	57 61 68 -0	163.86 163.86	78·13 77 17	79.83 37.16	105:49 91:92	247 68 257 87	153°24 106°46	7·00 7·01	1st half 2nd "	} 131 <i>a</i>
	328·42 366·02	247·85 207·63	377·21 486·41	335·08	729 70 370 69	171 54 427 00	357.51 369:64	117 61 1.8.71	352 02 2657e0	272.81 312:74	13256 271 91	123·41 126·51	207:60 204 H	231·61 165·95	111°50 92 99	1st half 2nd ,,	} 132a
	111 99 143 03	5·75 7·65	206-13 128-00	77·11 217·13	23 65 33·19	4·13 2/36	68 16 80 02	34 39 56:09	350 98 187:73	46.03 51.22	0.95 4°28	8:11 12:90	37:18 718:57	98·78 119·58	11:50 21:11	1st half 2nd ,,	} 153a
	3.00 3.00		0.10 0.10	ö 68				- 8:95 4 91					•	<b></b>	••• ··	1st half 2nd ,,	}134a
	45:90 68:77	18·19 41·39	117:12 165:25	100 26 147:22	38-85 31-37	181°; 1641	13 39 13 39	28.62 8 40	69 98 69 98	44/28 65/47	18:82 27:15	23 23 36 72	28 J2	89:58 33:10	-4·87 22·06	14t half 2nd ,	} 135a
	40.01 65.45	28·32 22·77	94°63 159°23	109-95 112-19	60:21 67:81	2 ro7 10 58	89 95 41 55	181 13 63	37:92 4 10	33·60 61 38	9	23:93 8:38	17 21 • 9%7	56 06 39 59	9:33 49:61	1st half 2nd ,,	} 1860
	613·50 742·02		938°31 1,087°39	1,005:40 900 32	9°5°50 632 02	23518 478:66	620°69 663°27	263:25 336:12	941:28 695:09	474.67 567.98	19 ± 55 352·72	2:)1:17 276 43	513 91 1,819 03	634:27 498:58	134 !6 195:78	1st half 2nd	} 187a
-							i										,
	71:78 82:03	45.06 52.57	121-43 122-29	91:49 99:81	110 72 11 <b>5</b> ·71	20:23 21:16	77%0 80°30	:0 07 :0 09	141:94 141:78	70°70 69 51	27 36 34 F1	98:15 84.90	223°60 232 52	1/3·74 123:50	6°59 6'61	1st half 2nd ,,	} 13 <b>1</b> 5
	284·72 315·71	225:39 183:80	321:93 415:; 0	510:25 251:83	656419 583 43	162 91 405 01	305 68 315:55	127:78 157:91	311 96 237 31	215:46 281-68	$\frac{124.45}{2.7.33}$	114/83 116/84	187 12 181 32	210:08 <b>1</b> 55:31	105:09 87:66	1-t half 2nd .,	1326
-	97119 123137	5°23 6°26	176·16 109 00	65 14 184 82	21·27 30·12	3:93 2:23	58:17 68:24	29°89 48°74	310.24 165:58	41.53 46 13	0 £ 9 4:01	7·55 11·91	33:52 657 91	89 73 108 53	10°84 22°73	1-t half 2nd ,,	} 13 <b>3</b> b
	0.80 2.84		0·25 0·08	0.57	•••		:	-3:43 4:27	 	•••		,				1st half 2nd ,	} 13 <b>4</b> 5
Ì	89·79 59 82	16.51 37.82	100°21 143°27	92·73 125·14	31 95 25 21	17 92 15 57	54 99 62 65	25:90 30:23	31· 7 61·82	99.86 53.97	17 65 25 41	30·93 13·92	3) 26 25 51	81:37 29:96	-159 20:79	let half 2nd ,,	1356
	34:69 56:46	25·75 20·71	60:75 135:60	93 31 25·61	51·15 61·02	19 05 10 01	58 89	-1:11 11:83	23: <b>7</b> 3 <b>4:3</b> 3	30 28 55 28	5 88 8 62	22:23 7:74	15.54 8.90	0 92 35:94	46.77 46.77	1st half 2nd ,	} 136b
	531 87 640:03	817:97 806:86	800·73 926·11	853 25 790 78	877 48 568:49	2.3.31 454.01	529 63 566:26	2º 8 80 292 67	832 04 614:12	427:83 511 07	186 23 350:18	278 72 255 31	491 04 1.000 71	573 14 452 69	125°71 184°56	1st half 2nd .,	} 187 <i>6</i>
	0.08 0.88	1·07 1·51	1·19 1·20	1·09 1·13	1:45 1:91	0·43 0·46	0·73 0 79	0 79 0:91	1 53 1 40	0:84 0:92	1/53 1/51	2·73 2·14	3·18 3·25	1·71 1·30	6:21 0:21	1st half	}131e
	3 37 3 74	5 33 5 41	3·17 4·09	6:07 3:24	8 80 5·59	3:45 8:94	2·89 3·11	2 01 2 14	€ 37 2·44	2·91 3 71	5·11 11·07	3·19 2·95	2 51 2 60	2 : 5 1 63	3 30 2 77	Ist half 2nd ,,	}102;
	1·15 1·46	0·13 0·20	1473 1 07	0.78 2.10	0·29 0 51	0:08 0:05	0 55 0 67	0·47 0·76	3·35 1·70	0 50 0 <b>6</b> 1	0.04 0.12	0·21 0 31	0·53 9·13	1·00 1·15	0°31 0°72	1st half 2nd ,,	} 130c
	0.04 0.01	•••	•••	ö <del>.</del> 01		···		-0.02 0 06					 			1st half 2nd ,,	} 1840
	0·48 0·70	0.09 1.08	0·09 1·11	1·10 1·42	0.17	0 36 0 34	0·52 0·63	0·11 0·47	0.37 0.63	0:48 0:73	0 72 1 09	0:86 0:85	0.18 0.18	0°98 <b>0 81</b>	-0·11 0 66	1st half 2nd ,,	} 1850
	0·41 0·66	0.61 0.59	0·79 1·33	1·11 1·10	0·72 1 03	0·10 0·23	0°31 0°31	0.10 0.03	0·37 0 04	0·36 0·74	0.58 0.58	0·62 0·19	• 0 25 0·12	0.88 0.83	0 28 1·48	1st balf 2nd ,,	}196e
ľ	6:30 7:58	7 58 8:70	7·87 9 10	10:15 9:00	11 76 9:53	4 72 10:02	5 60 5:58	3:61 4:53	6:30 8:99	5 12 6-79	7 64 11-20	7:61 6:14	7:64 15:49	6 98 4:77	8:99 5:84	1st half 2nd .,	} 137a
	0 24 0·27	0:36 0:54	0:35 0:35	0:85 0:85	0·17 0 61	0 12 0·11	0 19 0°23	0:21 0:22	0 50 0 <b>49</b>	0.58 0.58	0·4.3 0 49	0.80 0.80	2 51 2 37	1 88 1 42	0·13 0·17	let half 2nd ,,	} 191.4
	0.03 1.03	1·82 1·93	0·92 1·19	1·98 1·00	2·78 1·86	1·00 2·81	0·76 0 87	0 62 0:53	1·10 0·50	0·96 1·29	1·43 3 54	1 00 0:91	· 3·11 1 87	2·76 1·77	2 19 2 20	1st half 2nd ,,	} 132d
	0:32 0:40	0.04 0.04	0°50 0°31	0°25 0°65	0 09 0·17	0.03	0·11 0·19	0°15 0°19	1:19 0:56	0·16 0·21	0.0 <b>0</b> 0.01	0.09 0.09	0°33 6 59	1·15 1·24	0-22 U-57	14 half 2nd ,,	} 130 <i>a</i>
-	ö:01		•••	: ::	:::	•••		- 0.01 0 02			::		 	:::	 	1st half 2nd ,,	} 134.1
	0·13 0·19	0·13 0·39	0·28 0·41	0 36 0 43	0·15 0 16	0·10 0·10	0·14 17	0·13 0·11	0·12 0·21	0·15 0·27	0 20 0 84	0.27 0.27	0:35 0:2 <b>6</b>	1·97 0·35	-0 00 0:52	1st half 2nd ,,	} 135d
	0·11 0·18	0·21 0·21	0 23 0 23	0.88 0.88	0·22 0·34	0·12 0·07	0.10	-0.01 0 05	· 0 12 · 0 01	0 12 0 25	0·06 0 13	0·19 0·6	0·17 0 09	0 68 0 41	0·18 1·17	1st half 2nd "	} 136d
•	1 78 8 08	2·57 3·14	2·28 2·65	3·30 2·76	3·71 3·17	1 87 3 18	1·32 1·55	1·12 1·12	2·93 2·07	1·67 9·34	2·18 4·54	2·99 1·99	5·52 11·18	7:57 5.19	2·56 4·68	1st half 2nd "	} 137d

APPEN

# Analysis of working of each railway

Nore. - Railways not shown

	*****************		iauge.		*********	******	*********	5' 6"					ī
Average price of Coal . E	f.		Number	1 (a)		3 (11)				8 (a) & (b)			11 (α)
Average price of Coal In.   Solidar   200   1049   630   197   1102   690   460   13100   830   744   13100   830   830   744   13100   830   830   744   13100   830	Serial numb	Particulaus.	dar year 1906 by helf-	Rengal- Nagpur.	Buroda and Contral	Bengal.	East Indian.	Indian Fenin-	Madra*.	Guar- anteed	North West-	Oudh and Rohil-	Assam- Bengal.
PER TOTAL TRAINMILE.										TABL	E B.—L	OCOM	TIVE
Description   Wood		Average price of Coul . Re. {	146 half 2nd ,,									8 30 8 51	7:41 7:41
138a		terms of	1st balf 2nd ,,						4	1			
	*	PER TOTAL TRAIN-MILE.											
1906   Sunning exponence	138a	(including office experi-	1	ĺ	}	ł	i		ì				1
140a   Fuel	139a	Running exponses ,, {	let half										
141a   Water	140a	· · ·	Lef half							1.90	5:02	<b>5:7</b> 9	2:48
1432   Oil, tallow and other	141 <i>a</i>	Water , {	1st half	0:17	0.51	0.18	0 1.	0.31	0.31	0.27	0.25	0.15	0.55
143a	142a		l∘t balf	0:29	0.55	0.70	0.39	0.16	0.87	0.35	0.28	0.58	0.25
13A	1430			i	i		2:46		i	i l			
Continue   Continue		of locomotives ,, (			!		! !		!				1
1442   Other charges (act)		of machinery, tools and							i	) [			l i
Pinch consumed in terms of   Cond (Kunhur-   Inch half   Cond	1 <b>44</b> a		1×t half 2nd ,,										
Processing of the process   10.00	<b>14</b> 5a												
PER ENGINE-MILE   Ist half   O-87   O-85   O-97   O-55   O-16   O-57   O-64   O-18   O-54   O-77		harve) . lbs. (	1st half 2nd ,,										
1886   General superintendence (including office expenses)   Let half   0.87   0.85   0.37   0.55   0.56   0.57   0.64   0.18   0.54   0.77	4	4	1st half 2nd "						1	, ,			
Including office expenses   Sud   1992   1991   1937   1957   1963   1958   1971   1958   1958   1971   1958   1		PER ENGINE-MILE.						-				-	
Running exponses	1887	(including office expen-							ļ	1	_		
1405 Fuel	1398		1st half	2.02	2.21	1 30	1.28	2:25		1:53		0.96	1:32
141b Water	1406	c	1st half	1 05	5:81	1.85	0.66	4.07	3.48	1.63	4 60	3.21	1 95
142b Oil, tallow and other stores			lat half	0.14	0.12	0.12	0 09	0.30	0.27	0::3	0.22	0.12	0.17
Maintenance and renewal of locomotives		Oil, tallow and other	1st half	0.51	0.42	0.27	0.25	0.39	0 31	0.30	0.24	<b>0</b> :30	0.50
143A (b)   Maintenance and renewal (b)   State	1436									i	1	- 1	- 1
1445 Other charges (not)		Maintenance and renewal									1	- 1	1
1445 Other charges (not)		of machinery, tools and plant ,,										1	- 1
Coal (Kurhur- { 1st half 55'08 46'70 40'81 51'86 50'48 50'28 48'58 48'59 35'47 barco) . lbs. } 2nd , 54'16 40'02 42'24 50'27 49'05 50'80 47'31 48'17 45'27 40'64 formula in the strength of th	1446	Other charges (not)				0.33							
Fuel consumed in \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1456											8·17 7·72	
I terms of the third and the last the l	,	barco) . lbe. ?	let half 2nd ,,										
	;	terms of	1st half 2nd ,										

DIX 18—continued.

# system during each half-year of 1906-contd.

do not prepare these statistics.

	GAUGE.		6"	2′							3′ 3∦″					
<u>ن</u> و	Number.	1 (a)	9 (h) &(i)	:0 (a)	1 (8)	23 (a)	22 (a) to (j)	21 (a) to (f)	20(a) & (b).	2 (g) to (m)	18(a) to (c)	8 (c)	3 (b) and (c)	15 (a)	14 (a) to (d)	12 (a) & (b)
Serial number.	Calendar your 1906 by half- yours.	Haipur- Dham- tari.	Khushul- garh- Kohat- Thal ai d Nowshera- Durgai.	Kalkı- Simla	Jubbul- poro- Gondia exten- sion.	Udai- pur- Chitor.	South- ern Mah- ratis.	South Indian.	Robil- kund- and Kumaon,	Rajpu- tana- Malwa.	Jodh- pur- Bika- ner.	Hydera- bad- Goda- vari Valley.	Eastern Bengal	Burma.	Bhav- nagar- Gondul- Juna- gad-Por- bandar.	Bengal and North- West- ern.
					•	į							*		NSES.	XPE
]	1st half 2nd "	2·57 2·64	13°29 13°47	19:20 13:88	3:05 3:62	18:65 18:71	10·31 10·31	12:81 13:21		14.38	14:58 14:80	4·77 4·87	6·78 8·53	10.58 11.40	15·13 15·41	6·86 6·71
}	1st half 2nd ,,			 			 	.:	7 03 5:32	 			:::	:: :	::: :::	 
			(.25)	4.4*	1.10			0.00	0.70	0.28	0.35	0.06	0.61	0.83	0.4	0.42
}138a	1st half 2nd .,	1	0.28 0.24	1°45 1 <b>°</b> 09	1·19 0 90	1.66 1.68	0 65	0.60 0.59	0·79 0·81	0.43	0.31	1.12	0 57	0.83	0 99	0.43
} 189a	1st half 2nd	1.00	1·13 0 <b>99</b>	2·53 2·49	1 20 1 1 b	0·72 0·75	1.62 1.69	1.65 1.63	0·75 0·78	1:68 1:70	0.69	1·53 1·54	1·09 1·21	2:68 2:56	1°20 1°30	0·74 0·77
} }140a	lst half	0.48	1°50 1°60	• 9:04 10:92	1 40	5:2	2 60	2-93	3 53	3 82 4 90	4 18 4 17	1 29 1 30	1 49 2 41	3·53 3·50	3 49 8 03	1·87 1·94
} 141a	2nd ,, 1st half	0 28	():49	1.17	0.34	1.21 0.30	2 70 0°22	0.18	0.18	0.25	0.45 0.42	0·19 0·21	0·14 0·16	0 32 0 32	0·13 0·17	0·15 0·15
-	1st half	0°26	0 43 0:36	1 53 0 47	0.33	0 26 0 30	0.22	0 14	0 15	0:30	0:22	0.19	0.53	0:35	0.31	0.50
}142a	2nd ,, 1st half		0°36 1°27	2 69	0.56	0°31 1°49	0·17 2 01	0°08   4°64	0 25	0 28 2.66	0 35	0.88	0°28	0.82	0.31 0.83	0.38
}143a	2nd ,,	1	0.75	2.85	0 91	1.22	2 71	3 14	1.40	2 10	1 34	1 06	1.40	<b>2·3</b> 3	t 29	1.04
) 143 A	1st half		0.11	0.02	0 07	0.50	0.51	0 10	0:17	0.36	0.11	0 04	0.53	0.17	0 08	0.04
) (a)	2nd ,,	 1:31	0·03 0·39	0 (2	9°01 3 01	0.25	0 21	(-11)	0.17	0.11	0.12	0.05	0°25 1°54	0.15	0 07 0:52	0.65 0.02
} 144a	1st half 2nd ,		0.21	0 33	2 68		1·15 1·14	0°14 0°30	0.47	0.65	1 25	0 88	0.05	1 08	6.0	0.76
} 145a	1st half 2ud ,	5:00 4:26	6:13 5:26	17:44 19:80	8:12 7:61	9:87 9:83	8·62 9 59	10:19 9:60	7 80 7 21	10°47 10°37	8 14 8 8 L	5.86 6.71	9·15 6·63	10·18 11·68	7 26 7 34	5·10 5 30
}	lst half 2nd ,	26°28 25 89	18:91 16:64	72 36 81 70	18:36 56 83	35-92 31 81	35:93 36 69	31:92 32 60		37.76 36 91	43°05 39°43	37·72 37 34	39·01 39·65	45 09 41.82	32:31 27:48	41 24 40 13
}	1st half 2nd .,		 	••• ••		` . "			115·77 114 09			· 	::: **	:::	.::	:::
} <sub>1386</sub>	ist half	0·56 0·60	0.48 0.63	1 31 1·18	0°99 0°75	1.92	0.58	0.22	0.61	0 £0 0 55	<b>0</b> :33	0·86 1·03	0.48	0.69	0.66 0.81	0·35
) } 120 (A)	and ,, I thalf	0.96	0 93	2:30	140	1·58 0·67	0·67 1·44	0°54 1°50	0 65 0:69	1.15	0 65	1:37	0.85	2.20	1.67	0.63 0.60
}139 (ð)	2nd " 1st half		0 83 1·47	2 10 8 20	0 96	0 60 0	2 31	1 49 2-66	0 63 2 77	1·52 3·35	0 73 j	1.38	0 94	2·13 2·91	1°20 3°11	1.21
1406	2ad ,, 1st half	0°47 0°27	1·35 0·41	9 43 1.06	1·22 0 31	444	2 41 0 19	2 81	2·56 0·11	3.45 0.51	3 87 0 42	1 16 0·18	1.87 0.11	2°92 0°26	2·79 0·12	1·58
}1416	2nd "	0 23 0 23	0.30	• 1 13	07	0 24	0.50	0 13	0.13	0 23	0.35	0.18	0.18	0.26	0°15 0°21	0·12 0·16
} 142b	1st half 2nd ,,	0.51	01	0 43 0 10	0 16	0·28 0·29	0 14 0 15	0 23 0 25	0·19 0 z0	0.54	0.30	0.20	0.51	0.56	0.29 0.77	0.12
} <sub>1435</sub>	lat half	1·62 0·37	0.63	2.41 2.41	0°79 0°76	1:40 1:45	1·79 2·11	4·22 3·11	1·13 1·11	2·30 2·07	1·21 1·24	0·79 1·21	2·68 1·09	1.92	1.19	0.81 0.85
) 143	1st half		0.08	0 02	0.02	0.19	0.10	0.03	0.14	0 32	0.10	0.07	0.17	0.14	0.07	0.04
δ <u>Φ</u> ,			90.0	0.03	0 01	0.49	0.18	0.14	0.13	0.86	0.14	0.05	0.19	0·13	0·08 0·46	0·04 0·56
}144b	1st half 2nd "	1:96 1:20	0°32 0°26	0.08	2 48 2·22		1.03	0·13 0·27	0·51 0·37	0.63 0.63	0·75 1·15	0·70 0·78	1·21 0·27	0.20 0.80	0.17	0.63
} 145b	1st half 2nd "	5:38 4:05	5·04 4·43	15:82 16:80	6:85 6:95	9.18 8.53	7:67 8:56	9·54 8·77	6·12 5·81	9·05 8·95	7·92 8·20	5-27 5-99	7·15 5·14	8·37 9·28	6:47 6:76	4·18 4·85
h	1st half 2nd ,,	25·24 24·65	15·51 14·03	65:66 69:09	48 21 47:23	82·92 29·86	31:96 82:71	29·04 29·75	·**	32·62 31·96	40·17 86·50	33.80	80·47 30·78	87:03 84:88	28·78 25·30	33·81 32·91
1	1st half 2nd ,	 		:::		:::			, 90.90	••			:::	***		*** ****

APPEN

# Analysis of working of each railway

Nore.-Railways not shown

		GAUGE.					5′ 6″					<u> </u>
er.	_	Num-	1 (a)	2 (a) to	3 (11)	4 (a) to (d)	5 (a) to (1)	6 (a) to (d)	8 (a) &	9 (a) to (g)	10 (a) & (b)	11 (a)
Serial number	PARTICULARS.	Calon- dar year 1:00 by hall- years	Bongal Navour	Bom- bny, Baroda and Central India,	East ra Bong d	Eist Indian.	Great Indian Pennsula.	Madras.	Nizam's Guaran- tool State.	North Western,	Oudh and Rohil- khand.	Assam- Bongal,
,	PLR 1,000 GROSS TON-MILES.								TAB	L <b>E</b> BL	осом	OTI <b>V</b> 1
138c	General superintendence (melad-(ing office expenses) . Rs (	let half 2nd o	0 16	0:15 0:18	0 11 0-11	0·09 0·10	0·11 0 (3	0·13 0 t3	0·13 0·14	0·10	0·13 0·13	0·31 0·26
139/	Running expenses ,	1st hall 2nd 5	0°;;8 0°13	0 t5 0 t1	0.37	0°27 0°29 <b>e</b>		0:37 0:10	0:30	0°28 0°26	0°23 0°24	0.28 0.46
1400	Finel	l∾t half	0.26 0:22	1:05 1:12	0.53 0.58	0·11 0·12	0:81 0:87	0°76 0 92	0:32 0:32	0:96 0:98	0°78 0°76	0.79 (+86
<b>141</b> c	Water	1st bad 2nd ,	0%3 0 02	0.05 0.38	0.03	0.05	0.06 0.06	0 06 0 07	0.02 0.02	0.0 <b>1</b> 0.02	0.03	0.02
142	O.I. tallow and other stores ,	1st haf 2nd ,	0 05	6 03 0 08	0 08 0 08	0 01	0°08 0°09	0 07	0.08 0.07	0 05 0 05	0 07	0.08
143c	Maintenance and renewal of loconotives	1 ( hal) 2nd .,	0·19 0·18	0·72 0·67	0.70 0.11	0 82 0 31	0.55 0.66	0:61 0.83	0°34 0°37	0·74 0·57	0°35 0°31	0 5! 0 6
143 A(ç)	Maintenance and renewal of finachment, tools and plant ,	tet balt 2nd 11	0°02 0 02	0·10 e 11	0.08	0.03 0.02	0.01	<b>0</b> ·03	0.01	0 05 0 08	0.04 0.07	0·02 0 <b>10</b> 5
144	Other charges (net)	1 - 6 h di 2nd ,,	0.28 0.28	0 20 0 18	0°07 0°09	0°13 0 12	6:21 0:18	0 ^9 0 1 s	0.08	0:38 0:25	0:35 0:29	0:34 0:3
145c	Total locomotive expenses	1-t hali 2-al	1 61 1 69	2 83 2 .4	3:97 1.78	1°01 1°02	2:36 2:56	2:45 2:93	1-29 1-31	2:60 2:53	1 98 1 91	2·6 2·6
	Fuel consumed Cool (Kure ths. (	Ist have	Lis 54 177 98	135 14 152 99	187 II 19. II	14 . 48 15./36	361 08 49 861	176 90 186 68	154:31 152:56	161:05 159:27	188 61 179 60	230°5 250 <b>0</b>
	in terms of Wood . , {	let half 2nd "						<u>:::</u>				:::
	Division of the second								D'A RLT	E CCAI	PRIAG	
146a	PER TOTAL TRAIN-MILE. General supersystematics (in-	1-1 half	0 21 0 25	0 29 0 40	0.26 0.27	0°29 0°22	6°20 6°24	0.23 0.23	0.18	0.08	0°25 0 30	0.3
1 <b>47</b> a	Cluding office expenses) . Annas ( Repairs and renowals of (	let half	1:31 1:23	2.00 1.80	1:60 1:22	1.05	1·65	1 19	0.61	0·75 0·75	0.79	0.5
148.	Repairs and renewals of C	2nd 1st half	0.94 0.89	2 63 1770	1:15	2730 1 87	1 15 1 25	1.64 1.50	1:26 1:17	0.91	0.54 0.83 0.27	1.1
148A	Repairs and recewal of smachinery, tools and plant	3nd ,, 1st halt 2nd ,,	0.49 0.0a	(1.75	0:03 0:03	0 07	0°11 0 11	0.11	0.01	0.00	0 27 0 27 0 11	0.0
(4) 149a	Cleaning and oding	1 thd!	0°46 0°51	0 a1 0 50	0°27 0°29	0.24 0.25	0:47	0.37 0.38	0:31 0:32	0:33 0:31	0.34	0.2
1:0 <i>a</i>	Other charges (not) , }	2nd ,, 1st haf 2nd ,,	0.06 0.06	0.03	0.03	0.03	0 02 0 02	0.15 0.38	:::	0·02 0·02	0.00	0.5 0.0 0.0
15 <b>1</b> a	Total carriage and wagon { expenses	1st helf 2nd ,	3°13 2°09	6:14	3.04 27.4	3 87 3 10	3:00 3:15	3 90 \$ 52	2:38 2:38	2·15 2·01	2·04 1·56	2·4 2·0
	PER 1,000 VEHICLE-MILES RUN BY HOME VEHICLES.											
146 <i>b</i>	General superintendence (including effice expenses)	1-t half 2nd .,	0°47 0°53	0 91 0 29	0.90 0.92	0.48	0.84 0.91	0.64 0.72	0.46	0·25 0·25	0.77 1.03	1·0 0·9
1476	Repairs and renewals of coaching vohicles calculated on con, }	1st half 2nd .,	13°53 11°65	15:67 11:20	11 00 9·40	9 00 7·52	10 67 10 20	10 19 13:96	7·05 6·17	6·76 6·36	6:91 4:55	5·8 7·3
1.18%	vehicles calculated on goods , {	1st half 2nd ,	2°°4 2 44	9·48 7·61	8.05 6.45	6·99 5·62	5·23 7·05	7·03 8 81	4·09 3·41	4:43 8:78	1:53 1:60	6·8 7·7
148A (0)		ist half 2nd .,	0 17 0 10	0.60 0.15	0·11 0·11	0·16 0·22	0.55 0.38	0·45 0·45	0.03 0.04	0.11 0.18	0.83 0.87	0·0
1496	Cleaning and orling , {	1st half 2nd ,,		1·17 1·27	0.92 1.01	0°53 0°53	1:48 1:69	1.05 1.28	0.80 0.25	1.09	1·03 1·12	0.8 0.8
1506	Other charges (not) , {	1st half 2nd "	0·12 0· <b>13</b>	0.00 0.08	0·11 0·04	0.08	0.08	1·10 1·35	:::	0·05 0·05	0·20 0·04	0.0
1518	Total carriage and wagon {	1st half 2nd ,,	6:36 6:36	14·26 12·05	11.57 9.87	8·70 14·46	9·43 11·26	11·18 11·58	6·02 5·28	6·20 6·20	6·24 5·37	8·5 9·7

DIX 18—continued.

system during each half-year of 1906-contd.

de not prepare these statistics.

				·	3′	34"						,	2′ 6″		GAUGE	1
12 (a) (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (1)	18 (a) to (c)	(g) to (m)	20(a) & (b)	21 (a) to (6)	(a) to (i)	23 (a)	1 (b)	30 (a)	9 (h) &	1 (e)	Number	
Sengal and Vorth- Vest- ern.	Bhav- nagar- Gondal- Juna- gad-Por- bandar.	Burma.	Eastern Bengal.		Jodh- pur- Bikanor	Rajput- ana- Malwa.	Rohil- kund and Kumaon,	South Indian.	South- orn Mah- rutta.	Udai- pur- Chitor.	Jabbul- pore- Gondan exten- sion,	Kalka- Simla	Khushal- garh- Kohat- Thal and Nowshera Largai.	tari.	Caleudar year 1906 by half- years.	6 5
KPEN	18E8-4	oncld.									•				1	
0·12 0·12	0·25 0·35	0·24 0·24	0.30	0:38 0:38	0·10 0 11	0·15 0·18	0·22 0·20	0·20 0 19	0°21 0°26	0:47 0:54	0:37 0:28	1.05 1.00	0.63 0.81	0 37 <b>0</b> :50	1st half 2nd ,,	} 138c
0·21 0·21	0·41 0·47	0.77 0.74	0·36 0·37	0·4° 0·52	0.20 0.25	0·41 0·49	0.20	0·51 0·53	0.53 0.58	0.50	0:37 0:85	1·83 1·80	1·22 1·07	0.61 0.77	1st balf 2nd ,	}1390
0·52 0·54	1·19 1·08	1·03 1·02	0.61 0.74	0·43 0·43	1 30 1:32	1·02 1·11	1 10 0 79	0 95 1 01	0.85 0.83	1:46 1:51	0.44 0.15	6:53 7:88	1 95 1·74	0.39 0.31	1st half 2nd s,	1400
0·04 0·04	0.05 0.06	0·10 0·09	0.01 0.02	0:06 0:07	0·10 0·4 <b>3</b>	0 07 0 07	0.08	0.08 0.02	0·07 0·08	0.09	0·12 0·11	0.04 0.96	0.24 0.14	0.53 0.1 <i>a</i>	1st half 2nd	}141e
0°06 0°05	0 08 0 11	0 10 0:09	0.08 0.08	0.00 0.07	0·10 0·12	0.08 0.08	0.08	6 08 6 09	0 05	0.03	0 07 0 07	0.34 0.34	0.10	0·17 0 17	lst half 2nd	} }142c
0·27 0·29	0·29 0·16	0:46 0:68	1·12 0·43	0.16 0.53	0:37 0:43	0·71 0·67	0:45 0:85	1·52 1·13	0.68 0.01	0·43	0°30 0°28	1.94	1 38 0 81	1:08 0:31	1st half 2nd	} } } }
0.01	0.03 0.03	0.05 0.05	0 07 0:08	0.01	0:03 0:05	0·10 0·12	0·05 0·04	0 03	0.07	0 05 0 16	0.03	0.02 0.01	0·11 0·08		1-t half	143
0.10	0 18	0°20 0°32	0°50 0°11	0°25 0°25	0.51 0.40	0 19 0 17	0.22	0.01 €.10	0:38		0 95 0 82	0 05 0.58	0·42 0 33	 0°84 1°01	Ist half Ind ,,	} A(c) } 144c
0.21	0 96	V 34	0 11	0 25	U IKI	017	0.15	0.10	0.15		0.07	0.20	0.55	1.01	anit ,,	<b> </b>
1·12 1·47	3 67 5-1d	2:95 3:23	2-98 2-04	1°S. 2°21	2:47 2:81	2:76 2*88	2:42 1:80	3:42 3:15	2·82 3 31	2·78 3 12	2 64 2:36	12 60 14/33	6 65 5 71	3 59 3 38	1-t half and ,,	}145c
128:48 128:51	176°5 ! 157 05	208 6k 195 16	202:99 194:90	190·85 199 00	200 32 20023	159°10 164°25		166°76 170 94	187·79 202·37	158:44 162:92	327:81 2°1 57	836·64 943·15	328°26 289°34	269-91 329-09	lst half 2nd ,,	
			 				575:25 451:80								1st half 2nd ,.	
'A GO	N EXP	ENSES	<b>3.</b>													
0·15 0 16	0.21 0.30	0°24 0°21	0°35 0°31	0·14 0·17	0·11 0·11	0·22 0·23	0.3%	0·20 0·19	0.22 0.24	0:39 0:39	0·23 0 16	0·18 0·46	0 07 0:07	0·14 0·16	1st half	}116a
0.38 0.11	0°82 1°55	0·79 0·81	1.03	0 39 0:35	0 13 0 46	1.27 1.05	0:63 0:9 <b>3</b>	0.63 0.72	0.91	0:41 0:37	0.85 0.42	0·55 0·78	0·21 0·17	0·55 0·23	1st half 2nd ,	} {147.e
0 45 0·59	0:118 0:34	1:37 1:15	3 38 0·73	0 27	0 31 0 33	1:49 1:04	0.61 0.71	0:94 1:13	0 77 0 75	0 17 0 26	0.4; 0.31	0 06 0 95	6·19 0·20	0·09 0·16	1st half 2nd	}148a
0.03	0·04 0·03	0.02 0.02	0.02 0.03	0.05	0.00 0.09	0·12 0·14	0 02 0:03	0 03 0:05	0.01	0.06 0.07	0.03 0.03		0 01		15t half 2nd ,,	} 148 } <b>A</b> (a)
0·30 0·28	0·21 0·24	0·26 0·25	0.36	0·16 0·20	0·18 0·19	0.527 0.530	0:34 0:38	0.31	0 16 0 18	0.50 0.48	0:38 0:37	0:31 0:30	0·41 0·33	0·24 0·21	1st half 2nd ,,	}149a
0.02 0.03	0.03	0.02 0.03	0.05 0.07		0.01	0.01	0 06	- 0.07 - 0.01	0·01 0·04		0-66 0-02		0.03 0.03	0.10	1.t bull	} }150a
										<del></del>						
1·39 1·47	1.67	2 73 2·55	5.14 2.55	1·18	1.18	3:38	1.98 2.41	2:03 2:39	2 (9 2 16	1·53 1·58	1 19	1:40	0.81	1·14 0·81	let hulf and ,,	}151a
0.34	0·55 0·77	0:65 0:66	1·02 1·00	0:46 0:62	0.30	0:50	0.75	0.00	0.62	0.98	0.56	3:45	0:41	0:50	1-t half 2od .,	}1468
0°38 2°56	4.35	5.97	6.24	4·42 3 25	0·31	0·55 8·87	0·75	0.61 3.76	0 70 7:96	1.05	1.95	3 45 3 90	0°45 3°28	0.76 6.61	lst half	11576
2·23 1·68	1.90	5:96 5:71	6.85 18.23	1.29	2 97 1.40	6·54 5·11	5·89 2·16	4:48 5:65	7°50 3°26	1.11	2 86 1.04	5·77 0·46	2·17 6·05	3·74 0·50	2nd ,	} 148 <i>b</i>
2·53 0·07	0.11	5.06 0.14	4·51 0·07	2.60	1.75 0.11	4·09 0·29	0.02	0.10	3 50 0·11	1·95 0·16	0.06	7.04	2·80 0·07	1.22	2nd ,,	148
0.66	0.09	0.50	0.15	0·07	0·25 0·48	0.83 0.64	0.07	0·15 0·92	0·12 0·47	0·17 1·27	0 05 0 93	 2·18	0 01 2·63	0.08	2nd ,, 1st half	} 1496
0.70	0.63	0.70	1·16 0·15	0.01	0.03 0.03	0·71 0·03	0·85 0·13	-0·20	0.03	1·28 0·01	0·89 0·16	2.24	2·16 0·18	0.35	2nd ,, 1st half	}1506
0.07		0.04	0.23	0.01	0.01	0.03	0.01	-0.03	0.13		0.13		0.31	0.03	2nd ,.	\$ A000
8·10 8·64	4·32 6·43	7:38 6:99	14·98 8·19	3·25 4·27	2·97 8·44	7:83 6:60	4·58 5·52	6·13 7·37	5·98 6·43	8·84 4·19	8·67 3·28	9·99 18·50	8·04 5·42	4·23 4·00	1st half 2nd "	}151 <i>6</i>

#### APPEN

# Analysis of working of each railway 7

Note.—Railways not shows

1	1	GAUGE.						5′ 6″				
er.	Particulars.	Number	1 (a)	(n)·to ( <b>/</b> )	3 (a)	(a) to (d)	5 (a) to (f)	(a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a
Serial number.	I ABITOURAGE	Calon- dar year 1906 by half- years.	Bougal- Nagpur.	Bombay, Baroda and Contral India.	Eastern Bengal.	East Indun.	(frest Indian Penjusuk.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Oudh and Rohil- khand.	Agaan Bongu
	and the second s	•										
	PER TOTAL TRAIN-MILE.	ļ ·							1	(A.B.L.E	D-TR	AFF.
152a	General superintendence (includ-) ing office expenses) Annas		0 92 0 94	0.91 1.03	1:30 1:21	0-84 0 93	0.00	0°87 0°87	0.23 0.60	0·51 0·51	0.74 0.79	0·8
153a	Station staff	1st half 2nd ,,	2·28 2·26	3:31 3:31	6°36 7°34	2 85 3:25	2·09 2·25	2·22 2·23	1.65 1.93	2·18 2·37	2·55 2·55	2·5 8·8
15 <b>4</b> a	Train staff , {	1st half	0·65 0 91	0 87 0 89	1°14 1°13	1·22 1·26	1·28 1 36	0·72 0·77	0.66 0.73	0.88 0.88	0.82 0.82	0.0
155a	Fuel, lighting, water and general stores ,	1st half 2nd ,		0.89 0.89	1·18 0·95	0.81 0.70	0.67 0.82	0·54 0·47	0·12 0·46	0·57 0·60	0·56 0·51	0.4
<b>15</b> 6a	Clothing, {	1st half 2nd	0:02 0:0 <b>5</b>	0·12 0·09	0.0g 0.0g	0.07 0.08	0·07 0·07	0.10	0.10	0.10 0.10	0·19 0·05	0.5
157a	Printing, stationery and	1st hall 2nd .,	()·19 ()·19	0:55 0:59	0·36 0·38	0.31 -0.36	0·23 0·32	0.68 0.49	0·28 0·15	0·17 0 18	0·14 6·34	0:
158a	Charges for delivery and collection of goods, etc ,	let hall	<u>.</u>		0 02 0:0 <b>2</b>	0.01 0.01	0.01 0.01	0.02 0.01			0.02	
<b>1</b> 59a	Miscellaneous expenses	1-t half	0.03	0.03 0.05	0·01 0 07	0.05	0.05	0 06 0:05	0·01 0·02	0.01	0 01	0.
160a	Payments to other lines . " {	1st had 2nd	1:07 1:05	0·14 0 13		0.08	0.08 0.07	0.05 0.05	0 30 0 41	0.01	0 20 0 27	::
<b>161</b> a	Other charges (net), }	1st hali 2nd "	0°11 0°01	0.61 0.01	0.01	0:01 0:01	0 02 0 05	0 07 0:05	0.61 0.01	0.03 0.03	0.03	0
162a	Total traffic expenses ,, {	lst half 2nd "	5:74 5:94	6 91 6 96	10°48 11°17	6 22 6:72	5 61 5 53	5·33 5·10	3·91 4·41	1 41 4·71	5 (3 5 to	4.5.
	PER CENT. ON TRAFFIC EARNINGS. (Abstracts II and I of Revenue											
152 <i>b</i>	General superintendence (includ-fing office expenses) . Per cent.		1.28 1.55	0·86 1·16	2·41 1 63	1·10 1·26	0.75	1.52	0·76 0 58	0.86	1·45 1.74	2.2
1533	Station staff	1st bal	ł	3·17 3 80	11.75 9.88	3·73 4 47	3:60 3:50	3·21 3·60	2:36 2:86	3·70 4·08	5.04	67
1546	Train staff ,,	lst hali 2nd "	1	0.82 1.02	2·12 1·52	1·59 1·72	1:84 2:30	1.01 1.24	0 94 1 08	1:46 1:52	1.73	1
1556	Fuel, lighting, water and general stores	1st hall	0.83	0.00	2·18 1·28	1:06 0:95	0 97 1 39	0·79 0·76	0.68	0 96 1 04	1.11	1
1566	Clothing ,	1st hali 2nd "	f 0:03	0·11 0·11	0.10	0.09 0.11	0.10	0.15	0.08	0.07	0:38	0
1576	Printing, stationery and tickets	1st hal	0.26	0·52 0·67	0.67 0.51	0·41 0·49	0.31	0.88	0.49	0·29 0·31	0.29	
1584	Charges for delivery and collection of goods, etc.	1st hal	0.01		0.03	0.01 0.01	0.03	0.03		0.01		
1596	Miscellaneous expenses . ,,	1st hal 2nd	0.01	0.03	0.08	0·02 0·02	0.03	0.00	i	0 01 0.01	0.01	0
1608	Paymonts to other lines . "	lst hal	1.49	0.14		0·10 0·10	0·11 0·12	0.07	0.43	0.07	0 39	<b>.</b>
1618	Other charges (net) . "	lst hal	d 0.01	0.01	0.03 0.03	1	0·02 0 03	0.10	0 01	0.08 0.08	0.08	
162 <i>b</i>	Total traffic expenses	1st hal 2nd "		6·55 7·98	19:38 15:02	8·13 9·15	7·21 9·36	7·71 8·22	5·59 6·53	7·48 8·12	10·51 11·88	13
	General superintendence per cent. on traffic earn- ings (including steam- boat) . Per cent.	1st hal	1·29 1·55	0.86 1.16	2·41 1·68	1·10 1·26	0°78 1°01	1·25 1·40	0·76 0·88			2.2

IX 18-contd.

# ystem during each half-year of 1906—contd.

o not prepare these statistics.

					3′ 3¦″						L		2' 6"		GAUGE.	J
12 & (b)	14 (a)to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a)to(c)	2 (g) to (m)	20 (α) & (b)	(a) to \(\frac{1}{f}\)	(a) to (j)	23 (a)	1 (6)	30 (a)	9 (h )&(i)	1 (e)	Number.	8
engal and forth- Vest- ern.	Bhav- nager- Gondal- June- gad-Por- bander.	Burms.	Eastern Bengal.	Hydera- bad-Go- davari Valley.	Jodh- pur- Bika- ner.	Raj- putana- Malwa.	Rohil- kund and Kumson.	South indian.	South- orn Mah- ratta.	Udai- pur- Chitor,	Jubbul- pore- Gondia exten- sion,	Kalka- Simla.	Khushal- garh Ko- hat-Thal and Nov- shera- Durgai.	Raipur- Dham- tari.	Calendar year 1906 by half- years.	Serial number.
KPEI	ibes.										•				*	
0.80	0·87 0·89	0.81 0.86	1:09 1:02	0:83 0:79	0.28 0.28	0 50 0 59	0·70 0 76	0·78 0 69	0:52 0:59	1·75 1·65	1·26 1·19	1·58 1·58	0·19 0·48,		lst half 2nd "	} 152a
1·69 1·54	2·12 2 52	2·14 2·12	8 03 3 36	1·55 1·67	1·17 1·07	1·84 1·92	1:65 1:77	1·78 1·72	1:38 1:53	2 13 2·06	1·94 1·91	3·20 3·28	1 45 1 31	1·67 1·27	1st half 2nd	} 159a
0·14 0·44	0·42 0·49	0·70 0·72	0·76 0 79	0·61 0·73	0.22 0.22	0·48 0·51	0:34 0:38	0·45 0 42	0 49 0 53	0 :5 0 31	0 70 0 95	1·12 0·71	0 54 0 56	0°37 0°54	1st half 2nd ,,	154a
0·50 0·47	0·72 0·58	0·47 9·57	0.70 0.84	0·42 0·47	0·42 0 46	0·52 0·52	0·55 0·60	0.47 0.43	0.80 0.58	0.38 0 17	0·59 0·42	0∙3₫ 0∙41	0·57 0 61	0.03 	1st half 2nd ,,	}155a
0.06 0.02	0.09	0·07 0·12	0.04 0.02	0·05 0·13	0.02 0.03	0 07 0:05	0 06 0 06	0·14 0·05	0·09 0 03	0 07 0:04	0.03 0.03	0 18 0 03	0 12 0 05		1st half 2nd "	}156a
0·23 0·19	0.48 0.59	0·39 0 21	0°05 0°02	0.50 0.51	0·13 0·22	0 30 0 34	0·47 × 0 86	0·27 0·23	0·26 0·26	0 63 0°86	0·11 0·17	0°63 0°13	0·17 0 18	0 03 0.03	1-t half 2nd ,,	}157 <b>a</b>
:::		0.03 60.0			 		<b>:-:</b> :.:	 			 	0.00 0.10			1st balf 2nd	} 158a
0·03 0·05	0.03 0.03	0.03 0.03	0:01 0:01	0.03 0.03	 	0 61 0 02	0.6 <b>3</b> 0.03	0.01 0.01	0.03 0.03	0°03 <b>0</b> °04	0.01	0 03 4·56	0 01	0.01 0.01	ist half and "	} 159 <b>a</b>
0·10 0· <b>0</b> 7	0 21 0 25	 •••	, ,	0·24. 0·48	0·45	0.08 0.08	0·22 <b>0</b> 26	0 07 0 07	0·17 0·21	0·37 9 36	0.65 0.57	0·24 0·15	:::		let half 2nd ,.	} 160a
-0.07 0.08	0°01	0.05 0.03	0·09 0·07	0.01 0.01	:::	:::	···	:::	0.03 0.03	 	0.03 0.03	0 01 0 01	0.03 0.03	0.01	ist half 2nd "	} 161 <i>a</i>
3·56 3·49	4·97 5·10	4·71 4·62	6 07 6 46	3 77 4:70	9:18 3:07	3 80 4 03	4/(·2 4-112	8:97 8:62	3·18 3·51	5:61 4 99	5:00 <b>4:</b> 33	7:30 11:48	3:28 3 22	2:11	lst half 2nd ,,	}162a
1 25 1 49	1·40 1·56	1·61 1 90	1·94 1·64	1·15 1·74	1·09 1·33	0.87 1.18	1:57 1:68	1:53 14:9	1·26 1·55	2·18 2 68	2:93 3:62	1·89 1·89	3:24 3:18	•••	let half 2nd	}152b
3.88 3.81	3·39 4·07	8:99 4:96	5 36 5:39	2·85 4·11	2·21 2·10	8 17 3 24	3·22 8 95	3·48 3·70	3:31 4:02	2·65 3·33	4·50 5*60	3 81	9 67% 8 75	4·69 5·18	let balf	} 'E36
0 95 1·68	0.66 0.85	1:31 1:69	1:34 1:27	1.13	0.41 0.50	0 82	0.60 0.85	0.88	1.18	0.85 0.49	1.6% 2.87	1.85 0.83	8 63 8 77	1·03 2 22	1st half	} } 15#6
1.07 1.15	1·15 0·92	0°88 1°33	1·24 1 85	0·78 1·04	0 80	0.90	1.08 1.34	0.93	0.68 0.78	0°47 0°28	1:35 1:29	0:36 0:48	3·80 4·05	ö <sup>-</sup> 11	1st half	} 1556
0·13 0 13	0.15	0-14 0 28	0.07	0·09 0·29	0.01	0.11	0·12 0·15	0.50 0.11	0 22 0.09	0.08 0.02	0.08 0.24	0·22 (r·03	0°84 0'36	ł	1st half 2nd ,	} 150b
0·49 0·48	0·77 1·03	0·74 0·49	0.62 0.51	0·44 0·43	0.49	0·53 0·68	0.98 0.79	0·52 0·50	0-49 0-70	0·79 0·58	0.36 0.21	0.76 0.73	1·14 1·19	0.09 0.12	1st half	} }187 <i>b</i>
		0.04 0.04		:::	:::							0·12 0·10			1st half 2nd ',,	} }1586
0·07 0·12	0.01 0.02	0·04 0·07	0.03	0.03		0.07	0.09	0.02	0.05 0.07	0·04 0·06	0.03 0.03	0.03 5.33	0.07	0.01	1st balf	} }159 <i>b</i>
0.51 0.18	0·39 0 43	***	A	0 41	0 45	0·14 0·15	0:43 0:58	0·15 0·15	0·40 0·56	0 48 0.59	1·52 1·78	0-28 0 17			1st half 2nd	}160&
-0·14 0·19	0.01 0.02	0.04 0.02	0.14	0.01		0.01	0.01 0.01	:::	0·07 0·07	:::	0 05 0·11	0·01 0·01	0·21 0 17	0 07	1st half 2nd "	} 161&
7:66 8:61	7:96 <sup>6</sup> 8:93	8·70 10·81		6:92 10:8 <b>3</b>	5·24 6·88	6·57 8·07	7·88 9·39	7·76 7 81	7·66 9·25	8.18 6.00	12:84 16:19	8·8/1 13·37	22:57 21:51	5·99 7·75	1st half 2nd "	}1628
1·16 1·40	1·40 1·56	1:61 1:89		1·15 1·74		0·87 1·18		1:58	1.76 1.55	2·18 2 68	2:98 8:62	1.89	24 3 18		1st half	
		į ė,		<u>                                     </u>			<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	1			22

APPEN

# Analysis of working of each railway

NOTE.-Railways not shown

;			~~~									ot shown
		GAUGE		2 (a) to		4	5′ 6″	6 (a) to	8	9 (a)	10	
nber.	Particulars.	Number	1 (a)	(f) Bom-	3 (a)	(a) to(d)	5 (a) to (f)		(a) & (b)	to (g)	(a) & (h	11 (a)
Seria number.		Calon- dur year 1906 by balf- years.	Bengal- Nagpur	buy, Baroda and Central India.	Eastern Bøbgul.	Fa-t Indian.	Grout Indian Peninsula.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Ondh and Rohil- khand,	Assam- Bengal.
*	PER TOTAL TRAIN-MILE.	•							TA	BLE E	-GEN	ERAL
<b>16</b> 3a	Home expenditure Annas	1st half 2nd ,,	0 67 0·78	0.67 0.68	0.13	6:35 0:41	0:36 0:40	0:39 0:39	0:49 0:63	0·10	0.09	1.56 1.38
<b>16</b> \$a	Agent's office—salaries and expenses	1st half 2nd .,	0·29 0·28	0°23 0°25	0:33 0:31	0 14 0 1	0·21 0·16	0.33 0.41	0 25 0 28	0·14 0·13	0 20 0 23	0.07 0.55
165a	Andit, accounts and pay office ,,	1st half 2nd ,	0 70	0 93	0.82 0.82	0 46 0:49	0·54 0·59	0·72 0·69	1·07 1 i9	0:38 0 42	0.62 0 67	1·12 1·02
166a	Stores Department ,,	1st half 2nd .,	0 19 0·20	0.34 0.35	0°27 0°26	0 15 0 18	0 17 0 19	0·11 0·11	0 19 0 19	0·11 0·11	0·16 0·21	0·44 0 41
167a	Modicul , ,	1-t half	0°22 0°25	0·21 0·23	0 18 0·19	0·16 0·17	0·10 0·12	0.16 0.16	0·16 0·18	0 10 0 10	0·10 0·11	0·42 0·34
<b>16</b> 8a	Rents and miscellaneous	is half	0 25 0 24	0 31 0 30	0 26 0 : 8	0°32 0 28	0.13	0°18 0°17	0°00 0 28	0 13 0 13	0·2: 0·21	0·15 0·14
<b>1</b> 69a	Police	1st half 2nd ,	0 20 0 22	0.43 0.14	0°17 0°22	0:21 0:25	0.22	0°°4 0°,5	0°46 0°53	013	0 14 0 16	. 0.25 0.31
1704	Advertising ,	ist half 2nd "	0.02 0.05	0.01	0 04 0 +4	0.01 0.03		0 °2 0 03	0 02	0.01	0.01 0.01	0.01
171 <i>a</i>	Electric telegraph ,	1st half 2nd "	0.85 0.97	1·18 1·27	0.91 0.86	0 76 0 78	0·73 0 76	0.8.	0·54 0 61	0.64 0.66	0.00 0.4	1.16
172a	Other charges (net),	1st half 2nd ,	0 01	-001	0.01	0 02 0 02	0.03 0.03	0.21 0:20		-0.01 0.03	ö <sup>.</sup> 01	0.01
<b>17</b> 3a	Total general charges , ,	1st half 2nd "	3·10 3·70	4.26 4.41	7·13 3 09	2°01 2°75	2·46 2·61	3 40 3 42	3 46 8 93	1·89 1·70	2 24 2 35	5·78 5·29
	PER CENT ON TOTAL											
1635	FARNINGS.  Home expenditure Per cent	1st half	0:91 1:23	0.63 0.77	0.51	0·15 0·55	0:53 0 67	0:55 0:62	0.67 0.89	0 <sup>.</sup> 17	0·17	4·00 3·01
<b>164</b> b	Agent's office—salaries and expenses , ,	1st half 2nd ,,	0.39 0.45	0·21 0·28	0·55 0 43	0·18 0·20	0.55 0.58	0 55 0 64	0 34 6:39	0·22 0·22	0·37 0 47	1·71 1·20
<b>16</b> 5h	Audit, accounts and pay office	1st half 2nd .,	0 94 1·11	0·83 1 04	1:41 1:12	0.23 0.88	0·77 0·98	1.01 1.07	1·47 1·67	0·64 0·71	1·15 1·37	2·87 2·25
1.66	Stores Department	1 dt half 2nd "	0·25 0·32	0.32 0'40	0.45 0.85	0.20 0.21	0°24 0°32	0 15 0·17	0.38	0·18 0·19	0.29 0.49	1·12 0·89
<b>16</b> 7 <i>b</i>	Modiorl " . , " {	1st half 2nd .,	0-29 0-11	0.20 0.25	0:31 0:25	0·24 0·22	0·15 0·19	0.23 0.25	0·22 0·26	0·17 0·16	0·19 0·23	1.07
1666	Rents and miscellaucous " {	1st half 2nd ,,	0:34 0:39	0·29 0 34	0:43 0:52	0 28 0 38	0·17 0·22	0·25 0 26	0·41 0·58	0·22 0·22	0·40 0·43	0.40 0.31
1694	Police	1st half 2nd ,.	0.33 0.54	0 41 0:50	0·29 0 80	0:31 0:34	0:31 0:41	n·48 0 34	0.63 0.75	0·21 0·21	0·39 0·32	0.64
1703	Advortising . , . " {	1st half 2nd ,	0 02 0 09	0.01	0.08	0·01 0·02	0 01 0'01	0.03	0·01 0 03	0·02 0 02	0.01 0.03	0.00
<b>1</b> 71 <i>6</i>	Electric telegraph	let half 2nd "	1 15 1 54	1·11 1 41	0 05 1 52 1 19	0:98 1:05	1 03 1·26	1·25 1·43	0·74 0·85	1 07 1 11	1·22 1·49	2·96 2·48
1728	Other charges (net) . , {	1st half 2nd "	0.01	-001	0·02 0·01	0.03 0.03	0·02 0 03	0.31 0.31	0.01	-0.07 0.04	0.01	0.03
<b>1</b> 796	Total general charges . , , {	1st half 2nd "	4·59 5 87	4·00 5·01	5·25 4·22	3·23 3 68	3·50 4·35	4·80 5·32	4·76 5·50	2·81 2·88	4·13 4·76	14·81 11·68
							<del></del>		!			
	PER CENT ON GROSS EARNINGS.	1st half	0.03	0.01	0.08	0.03	T. 0.04	ABLE C	-8PE	CÎAL A	M CVA	
174	Law charges Per cent. {	2nd ',,	0.03	0 03	0 04	0.04	-0.03 0.14	0.08	0.02	0.17	**: **:	0.10
175	Compensation , ,, {	2nd ,,	0·16	0 29	0.45	0 11 0 14	0.30	0.51	0.02 0.02	0·17 0·25	0·10 0·15	0.09
176	Rates and taxes , , , ,	2nd ,	0 22	012	0 14	0.14	0 21	0·16 0·23	0.58	011	606 608	0·12 0·13
177	Payments to other lines.	2nd "	1.91	0·31 0·19	0.23	0.90 0.81	0.51 0.85	0.28 0.95	0.08 0.88	0·21 0·14	1.63	0·53 1·18
178	Other charges (net) , , }	let half 2nd ,	1.17	1.11	0·92 0 93	0·27 0·26	0.96 1.26	1·29 1 23	1.31	0.87 0.85	1·18 1·19	4·23 5·06
179	Total special and miscellancous expenses , ,, {	lst half 2nd p	3.81 3.81	1·42 1·74	2·47 2·28	1·41 1·36	1'79 2 50	1·94 2·68	1·46 1·87	1.88 1.88	3.18 3.58	8-91 7-10

DIX 18-contd.

system during each half-year of 1906-contd.

do not prepare these statistics.

•	·············					3, 8	7"					T	2'	6"		GAUGE	
ĺ	12 (a) & (b)	14 (a) to (d)	15 (a)	5 (b) and (c)	8 (c)	13 (a) to (c)	2 ) (g to (m)	20 (4) & (b)	(a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 h) &(i	1 (e)	Number	
	Bengal and North- West- eru.	Bhav- nagar- Coudal Juna- gad-Por- bandar.	Burma.	Eas- tern Ben- gul.	Hydera- bad-Go- davari Valley.	Jodh- per-Bi- kaner.	Raj- putana- Mulwa.	Robil- kund and Kumaon,	Houth Indian	South- orn Mah- ratta.	Udai- pur- Chitor.	Jubbul- pore- Gondia exten- sion,	Kal ka- simle.	Khushal- gorh- Kohat Toal and Novshera Durgai.	Raipur- Dham- tari.	Calendar year 1966 by half- years.	
	CHAR 048	0·11	0.62		0 59		0 37	0 95	0.70	0.50			0.00	2.0	, Mar.	l	l
	0 48 0·13	0.11	0.23		0.85	0.18	0.39 0.12	0 98	0.76	0.58 0.65	•••	1 87 2 00	1 08	0 10	1-18 1 19	1st half	} 162a
	0.12	0.78, 1.20	0 24		0·37 1 31	0 29	0.14	● 0.25	0 26	0 1 0 29	1 39		1 57	0 13	 	lat half	-161a
	0.62 0.62	1.12	0 59		161	0 14 0 15	0.23	0117 0 86	0 71	0 59 0 60	1 32 1 12	0.08	2.24	0 38 0 41	0 19 0 20	1st half 2nd ,,	} 165a
	0·10 0·10	0 81	0 19 0 19		0 23 0 28	0 00	0.70	0.13	0 20 0 19	0·17 0·19	0.13	:::	01	6 11	• •	ist half 2nd ,,	}166a
	0.0 <b>3</b> 0.03	0·36 0 52	0°21 0°21		0·28 0·35	0.08	0.12	0.09	0 24	0 14 0 17	0 21	0.20 0.20	0.60	0.00	, ,	lat half 2nd ,,	167a
	0·10 0 11	0.24 0.8	0 17 0 .6		0 31 0 39	0 11 0·12	0·17 0·18	0.31 0.31	0.12	0 17	0.85 0.20	0 07	0 1	0 12 0 .3	0 04	lat half 2ud .,	168a
	0·21 0·23	1.03 1.03	0.87 0.40		0 43 0 57	0 08	0 24	0.36	0 23 0 26	0 12 0 16		0 1a 0 11	0.39	0°45 0°35	0 80 0 43	1s half 2nd "	} 169a
	0.01 0.01	0 01	0 01 0 02		0.01 0.03	::-	0 101	0 02 0 03	0.01	. 0 01 02			0 01 5	0 0! 0 ul		1st half 2nd ,,	170a
	0·48 0·81	1:03 1 22	0 67 0·70		0·60 -0 76	0 70 0 71	0.66 0.4	0 52 0 78	0.62	0 7 0 84	0 92 0 93	1:31 1:29	0 62	( ·6 · 0 56	0 59 0 47	1st half	}171a
	-0·07 -0 04	0 01 -0 01	0.03		0.01		:::	<b></b>	0 02	o o1	٠.			-100		1st half 2nd	172a
	2·22 2·34	4·71 5 79	3·10 8 27		4 07 5 22	·1 67 1·84	2 35 2 58	3 28 3 87	3.70	8 03 3 36	4 34 4 06	3 69 3 72	9 19 8 27	1 98 1 82	2:00 2:29	lst half	} 178u
	0 94 1·04	0 18 0:24	1·20 1·67		1.66 1.80		0 63 0 77	1·77 2·03	1·52 1·62	1.06		4 23 5 97	2 82 2 28	0 66	3 26 4 85	1st half	}168 <b>å</b>
	0 26 0;34	0 \$\frac{4}{9} 1 \cdot 28	0 43 0 54	gange.	0.53 0.50	0:35 0:63	0 21 0 28	0 44 0 52	0:0	0:57 0:76	1 70 2 28		1 94 1 87	0 82 0 87		1st half	, }.1818
	1·17 1 83	1·89 2·17	1.06 1.85	ٷ	2 34 3 12	0 81 0 99	0 r8	1 21	1.13	1.10	11:36 1:78	0.20 0.25	3·(2 2 67	2·51 2·73	0:52	2nd " let half	, } 1656
	0·15 0·20	0·15 0·57	0 35 0 43	the 5'	0·41 0 60	0·17 0·23	0.32	0 24 0 35	0 40	0.39	0°16 0°20		0.06	0.70	0 73	2nd 4	} 16. <b>9</b>
	0·19 0·20	0·56 0·87	0·37 0·43	ed with	0·:0 0 75	0 11 0 18	0 20 0 26	0·17 0·24	0.46 0.45	0.34	0 27 0 38	0 57	0·70 0 47	0.60		2nd ,	, } 16·8
	0·19 0·24	0.38 0.64	0.35	Included	0·56 0·83	0 20 0 27	0.29	024	0 37 0 31	0.32 0.43	0 43	0.16	0 64	0.80		2nd ,, I	158A
	0:43 0:46	1 32 1 68	0.69		0·77 1·21	0.19	0·10 0·50	0·61 0 75	0·45 0·55	1 00	0.43	0.10	0.52	2.99	0 52	2nd ,, 1st half	) 1696
-	0 01 0·02	0 01 0.01	0.03		0.03	C·01	0.01	0 04 0:08	0.02	0.02			0 11	2 29 0 06	1.71	2nd ,, 1st half	} 170 <i>6</i>
	1·14 1·31	1 61 2 06	1 22 1 59		1.08	1·28 1 55	1.12	0 96	1.19	1 79	1 13	2.96	6.97	0:09 4 12	1 64	let half	•
	-0·14 -0·09	0.01	0·04 0·07		0.03			1 61	0·93 0·61	0.01	1 48	8 80	0 61	-0 26	1 91	1×t balf	} 1726
	4·84 8·05	7·40 9·81	5·69 7·44		7.29	3·07 4·04	4.00	6.11	6:35	7.20	5:85		10.84	18 07	6 36	2nd ,, let hilf	1786
							5 04	8 00	5.79	8.69	6.44	11.12	9.53	12 01	9 32	2nd "	, 1.00
1	LANE	OUS,E:	XPENS	ES.													
•	0·02 0·02	ö <sup>:</sup> 08	0·04 0·02		0.01	:::	Ö:03	0·12 0·01	:	0.01		*	0.08		:::	1st half 2nd	}174
	0.02 0.04	0.01 0.08	0·11 0 18		0·01 0·02	0 16 0 16	0·80 0·80	0 05 0·15	0.03	0·97 0 10	0.02	0·01 0·03	0.06	0·19 0 13		1st half 2nd "	}175
	0°03 0°04	••• •••	0·57· 0·08		0 01 0·51		0·11 0·12	0.01	0·18 0·22	0.08 0.08	•••		0.01	, 	•••	1st half 2nd "	} 176
	0 50 1 18	0.13 0.08	#	1	0·18 0·25	1·36 1·36	0 81 0·19	o.oa	0-18 0-28	0·14 0·24	1·04 0·17	0·04 0·18		:	***	let half	}177
	0.58 0.58	0·91 1·51	1 11		0·75 1 41	0·41 0·46	0·8# 1·11	1°28 3 38	0.68 0.68	1.67 1.47	0 25 0 45	1·41 1·95	-0 67 0.82	3·68 <b>4</b> ·35	0.81 0.60	1st baif 2nd "	}178
	0.83 1.50	1.01	2·02 1·32		0.94 8.19	1·93 2·48	1·42 1·75	1·29 8·67	0.92 1.17	1 96 1 90	1 81 1 62	1·49 2 17	0·48 1·01	8:80 4:48	0·60 0·81	let half 2nd ,,	} 179

#### APPEN

# Analysis of working of each railway

EXTRACT FROM TABLES PRINTED

Note.—Railways not shown

		GAUGE.			•		5 ' G"					
		Number	1 (a)	2 (a) to	3 (4)	1 (r) to (d)	5 (a) to (f)	6 (a) to	8 (a) & (b)	9(a) to (y).	10 (a) & (b)	11 (a
Serial number.	Particulars,	Calon- dar year 1906 by half years.	Bongal- Nag <sub>1</sub> ur.	Bome boy, Baroda and Control Inda.	Eastern Bengal	East Indian.	Gmat Indian Peninsula.	1	Nizam's Guaran- teo i State.	North West- eru.	Ondh and Robil- khand.	Assum Bengal
	FROM APPENDIX I											
180	Average number of locomo-	lst half	290	211	192	912	82⊰	266	59	798	210	7'
1	tives on the line No. }	2nd ,,	29)	217	198	800	870	276	59	813	198	8
181	Average miles can per loco- motive per dam Miles /	1st half	1	59 87	61 1:	70 97	6+39	62 75	67.15	73:32	81.53	70.0
	The cool per engine mile (coal burn-	2nd ,,	68.⊀\$	5 1:31	72 61	67.16	53 17	60.13	57 32	72-41	82-23	71-1
	ing engines; -	ist half	l	46 93	]   }				10.11	1		
182	Concling	2nd ,,		48 15	il .				39.25			
	• (	let <b>o</b> l	55°65	16 58	-5 17	31.56	50.00	50 32	52.08	48 58	48:60	35·1
1/3	Goods	2nd .,	51 16	498)	6 64	50 17	500)	50 85	50.91	18.17	45.27	408
184	Mixed	l≠t half		[51 01	l				18.79	li		l
164	Ibs, wood per engine-mile (wood	2nd		(51 17	زا				(48.20	j		
	but ong (n, ines)	1st hal		ļ			·	<i>.</i>				
185	Concluing , $\bullet$ , $Ib\cdot$	2nd ,										
	1	let hal			l							
18:	Goods ,. (	2nd ,,										
	<b>S</b>	1st hab		,								
187	Mizod	2nd ,.										
18.	Average grees weight of tunns -	1st hal	1924 0	178 90	213.69	225-27	181:12	160 33	118-24	244.86	184:77	119-1
16,	Concling · Fons-	2nd ,,	2/3/25	1751:9	227 20	*38 22	175:53	149 0-	126:11	241.03	175.09	1371
189	Unods	1st had	EJO1	(04:51	252 82	564-62	373:11	244 85	338.46	316 72	382.89	163.
100	(	2nd ,.	359.51	59.107	256.5	561-17	352 11	*11.44	319 37	315 59	318.01	218.4
190	Mixed	1st lali	353-14	212 10	190 78	209-62		331.75	283.78	249 81	208-42	123-2
•	Average through speed of trues	2nd ,.	332.55	199 74	138 65	291 53		352-28	208.03	264 63	206.07	167.9
191	onehing . Mil s per hour	1-t half	1	22.96	19 07	:2 00	23 49	21 85	22 /8	20 04	28.82	***
		2nd ,.	29 21 11 68	22 90 10 78	19 · 7 15 00	27 0)	23 25 1 49	21 28 11·40	9:50	·20 C1	28·89 10·64	
Jun	Goods,	1st half 2n.1 ,	11.93	10 10	15 00	16:00	10 27	11 42	10.00	11.60	10 38	
		1st hal	17:36	15.78	11.30	18-00	15:98	10 93	11.55	14.00	16.21	13.1
190	Mixed . "	2nd ,	17:63	16:5%	14:30	17 10	15:75	10.85	14:05	14.30	17.74	13.1
		,,					·					
	FROM APPENDIX II	Ì										
791	Average no longe per diem of .	let hal	106,256	96,649	70,7-9	3:8,630	286,818	94,417	16,332	345,364	112,082	83,58
	conching vehicles, includ- ing brakes	2nd ,,	112,926	98,650	79,474	323 458	299,822	95,326	13,793	366,769	109,036	86 27
195	Goods ditto ditto ,	1st hal	196,707	130,115	78,125	1 083,810	603,577	206,690	53,236	652,525	156,882	46,64
170	Goods ditte ditte ,,	2nd ,,	257,412	134,295	98,910	1,040,081	515,990	191,011	40,995	640,136	180,182	56,28
	FROM APPENDIX V.											
	Average age of sleepers -	let hal	€.06	9 78	8.00	9.67	***	5.69		8:11	11.89	
196	Wood Years	2nd ,,	i	9.84	8.00	8 83		5.80		8:20	12-29	_
10-	Ivon	1st hal	10.66	13.91 14.35	11.20	9.51		82.98		12.08	14.95	
197	Iron	2nd "		1435	11.20			33-22	'	12.38	15.88	
	Percentage of removals-	1st hal	f 2·08	8.76	4.28	2.71	5.66	2-24		2:68	0.25	8:
198	Wood Per cent.	and,	1	3.79	8.04	3.03	4.86	4.20	1	2.73	0.31	8.1
		lst hal	i	0.52	0 24	3-26	1.03	0.33	1	5.45	4.57	

# DIX 18—concluded.

eystem during cach half-year of 1906-conold.

AS APPENDICES TO THE ANALYSIS.

do not prepare these statistics.

					3′ 3§′	,							2'6'		GAUGE.	1
12 a) & (b)	14 (a) to (d)	15 (a)	3 (b) and (c)	8 (c)	18 (a) to (c)	2 (a) 10 (m)	20 (a) & (b)	21 (a)to (1	22 (a) to (j)	23 fa	1 (b)	3 ) ( )		1 (e)	Number	8
and North-	Ishavan gar-Gon dal-Ju- nagad- Porban- dar.	Burma.	Pastern Bengal.	Hyders-	Jodh- pur- Bika- ner.	Rajpu- te na- Malwa.	Robil- ku d and Ku- maon.	South Indian.	South- ern Mah- ratta.	Udai- par- Chitor	Jubbul pore- tenda exten sion.	ialk. imla	Khu-hal- gerh- kohat- Thal and Yow here- Durgai.	R.jpar Dham- tari.	Celend r year 1906 by helf- years.	
235	29	247	152	£0	48	418	14	235	237	3	20	24	27	4	lst half	)
265	20	252	1:0	50	51	443	42	244	237	3	21	15	26	4	2nd ,,	\$ 180
71.43	72.05	69 59	58-21	63.81	81.87	58.92	62.76	58:62	66.86	165 27	\$1.90	17:18	47 50	43 75	lst half	} 191
62.46	61.57	68:43	64.49	50 60	73 16	15.21	61.05	57.62	59.25	•••	52.45	32.00	55.76	43:59	2nd ,,	} -31
			ſ	3 <b>6</b> ·63	)									ſ	1st half	)
				84:35		'se							•		2nd ,	162
83-81	01:00	37:03	37.94	35.32	>40 ·17	36· <b>65</b>		29 04	32-10	32 92	48:21	65-13	15:14	25:24-3	ist half	}
82.91	28·10	34.84	83.14	33.71	36.59	32 96	***	20.75	32.77	29.85	47 23	39.08	14.02	21.65	2nd "	183
02 01				33.16			•••	20.10	02.11	-0 (,,,	1, 20			2.0	let half	184
			زا	83.09	J			.	1	į				()	2nd ,,	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
							ر ۱		ا ر	١					1st half	)
															2nd "	185
				`			200		31 72	!					1st half	)
							91:91	:5***	18.51	· .					2nd ,,	186
															1-t half	)
							( )	🙀	t	i					2nd	} 187
173 78	91.71	142.0	111-53	*.:*81	123 07	118 93		96:37	81.56			1.31	23:58		1-t half	188
170.97	101 97	147:41	142 0	*17 00	21 69	112.06		87-69	7 "13			50 0	16.63		2nd ,	<i>,</i>
200.15	189 98	189.63	. 20.63	156 00	80 35	5.0 01		166-63	197 25		1-0.26	20 05	38 65	99:4:.	l-thal.	189
196 63	198 91	179-46	211-22	1.1.13	107:15	257 47		108 63	174 M		13642	50 (0	18:26	59 (-4	und "	}
186 88	116 79	177'2:	1512)	150 85 14296	111:41	106.03		162 35	1612)	162- 9	176 32		33 62	81 77	1st half	} 199
178·18	134 49 20 65	176·52 18 75	150.41		106 88	131 05		103:20	18 0.	155 67	1/0 (%)	10.00	48.78	67 (2	2nd .,	) 
17:00	20.65	18.75	19 25			17.65	 :8 10	18 00	18:15	·	···	16.00		I	leth Af 2nd "	} 19 <b>1</b>
9.50	11.26	10:0:	11 16	11 01	1::-92	9.13	D G1	9.50	7 27		9 69	10 00	8:7:		1-t helf	`
9.50	11.26	9.71	11 16	11.91	10 73	9 63	9•99	9:5.1	7 36		9 69	10 00	8:53		2nd ,	193
12.20	13.62	12.85	15 00	13 05	10:72	14:11	13:55	12 00	12 35	11 76	11 33		9.71	10.37	lst half	,
12:30	18.62	13·13	15:00	13::2	13 92	1+38	13:33	12:00	12 32	14 76	11 33		9.68	10 21	2nd ,	193
	00 ***	110 000	00.000	1. 03.		000 700	06.50		20.500	2.22			4.555			
147,591 143,562	22,539 22,337	116,997 117,861	68,223	15,864		203,199		129,207	98,188	2 492	9,112		4,950	871	lst half	} 104
220,075	22,337	211 087	70 467 85,845	15,241 37,001	33,872 50 (85	16,480 422,013	22,533 27,100	i !	94,970	2,197 1,547	5 119 11.534		5,823 5,365	781 1,939	2nd ,. 1st b: If	,
219,301	18,651	199 901	81,797	27,816	41,377	341,584	21 185	141,094	160,581	1 014	6.573		5,281	1,341	and ,,	} 19 <b>5</b>
					,	,										
									1	j						
8.86	12.97	11:58	11 00	[	}	8.00	10.79	12.64	11.0		. 245		4.17	6 27	15t half	196
9.48	13.16	11 74	10.50	]	12 50	8.20	10.85	12.78	11 00			ý	4.59		Lad .	)
477	15 96	10.31	14.50		13 00	19 50	•••	1691	18:00				3.87		1-t half	} 197
	16.45	10.85	14 00	(	ر	20.00	•••	17:11	18.50		•••	""	4.22		2nd ,,	)
	4.51	8 35	8:15	··· [	)	3.41		4.83	2.49				6.31	1.62	ist half	198
1.40	2:38	2.41	2 71		0.09	8.26	9.83	2.16	3.22				6.36		"nd .,	§ 138
	0-17		0.28	]	0:12			* 0.12	1 28		•••		4.17		1st half	109
	0.05		0.47	i/	ز	. 0:31	•••	6.06	2.39		14.				2n i "	1

Rolling-stock under different heads on each

								<u> </u>												
1	GAUGE.			<del>-</del>	ــ ـــ ــــ	5′ 6″		<del></del> ,							3′ 3				<del></del>	
	Number.	1 (a)	2 (a) to (f)	3 (a)		5 (a) to (f)	6 (a\ to (d)	8 (a) & (b)	9 (a) to (y)	10(a) & (ხე	11	12 (a) &(b)		14 (a) to (d)	(a)	16	17 (a) & (b)	3 (b) & (c)	8 (c)	18 (a) to (c)
	Railway.	B N.	и В. &С. I.	E.B.S		IP.	м.	n.g.s	N. W	O.&R.	<b>A</b> .B.	B. & N. W	B. D.	B.G. J.P.	В.	D.	D, 8.	E. B. S.M.	H. Q. V.	J. B.
	Engines.																			
1	Engines { Passenger Goods and mixed	77 214	88 182	71 120	158 768	}862	{ 54 218	5 56	} <sub>820</sub>	{ 65 140	} 87	₹ 45 226	}10	37	${28 \choose 231}$	} <sub>2</sub>	26	{ 68 82	}55	48
2	TOTAL ENGINES	291	220	00:	946	862	272	61	820	2 '5	87	271	10	37	259	2	26	1:0	55	48
	Coaching wchicles.			1																
8	Saloons, Royal and State				4		2	14	8	<b>.</b>	4	3			2			3	8	3
4	Saloons, ordinary	2	13	18			١					13	4	2	9			18		1
5	Reserved carriages	16	9	2	43	7	12	8	65	23		4		7	30		'		8	•••
в	Inspection carriages	1				1	9			1	8		1			١.				5
7	Family carriages				٠. نر	8	4	2		2				5	1					
	1-whooled	26	2	15	87	92	38		82	40	1	40		8	27			14	8	7
8	First class carriages { Bogie		1		3	6		9					2					4		
9	Dining ours	ı			2	12			1	3	3	3	2		1					4
,,	Composite fort and 4-wheeled .	46	16	50	61	87	G8	12	103	56	4	40	1	4	38		10	52	11	20
10	Composite, first and Bogie	2	23	12	39	38			23	10	18	8	C	3	15	۱		2	2	
11	Composite, first, se- { 4-whooled condund third class					2 17	   8		 46		, 14									
12	Other composite carriages	5	3	24	1 65	5	3		31	10		l		3	111	2		3		3
13	Second class Bogie	1	13			1		77			٠.							3		
4	Codinary Second class with postal accommo	1	20	16		144	79	10		33		38	1	5	39			16	10	6
	dation. (4-wheel 1	1		29	71		4		128	29	<b> </b>	32		10				45		17
15	Intermediate class   Ambulance .			16																
	Bogio		12		17				5					4				2		
16	Composite, intermeduate and third	17		38	37		7		89	31		70	1				1	40		3
17	class Intermediate and postal carriages	1 :	5	6					15				2		İ	١.		8		
18	Intermediate, third and posts			3									3							
19	Carriagos Lower class	1																		
	4-whooled	1	158	197	672	608	480	64		5	"	3:4	22	125	233	8	41	232	65	69
20	Third older carriages \ Bogie without brakes.	1	81	i	140	67	1	•••	154		"	6		10	162	"		89	3	20
	(Ambulange	ı	15		95	16	57	".	174	3.9	1			\	51				\ \tag{\tau}	
21	Third clave and postulvans		1	3	51	24	12	5	52	33	16	19		4	39			8	4	10
	4-whosled	1	1		29	131	12		200	8.5	1	319			8	"	"	7		"
27	Third class carriages Bogia with brakes.	81			38	33	1		265	26	1	48			37	-				5
00	Au bulanco	1	i	105		22			263	207	1	104	12	".	150	"		105		
28	Brake-vans	j	_	105	77.3	708	1	49	464	1:9	ì	195	15	41	170	2	27	105	10	32
24	Brake-vans with third closs	1		25	•••	13	i		99	7	65		"	"	43	"	"	""	"	
25 26	Brake-vans fitted with postal com partment. Postal vans	1		1	18	9	1		10						5			 3		
27	Composite, postal and other carriag	ra				11		-					١							
<b>3</b> 8	Pricon vans	.				8						\			3			4		
29	Carriage trucks	۱ ۱	6	7	39	55	27	2	42			5		6	1			5		
<b>8</b> 0	Horse bexes	1	B , ,28	20	75	114	56	10	142	43	10	30	1	5	37		8	10	10	12
31	Luggago vans	3	1 26	26	48	115	40	6	61	43	12	1			23		4	10		
32	Produce Vendors' vans			16	10					•••						•••				
33	Milk vens			23	• •••											1				
84	Fish vens			31							8						2	23		-
85	Store, ice and stationery vans .				1				18											
36	Miscellanceus	1:	1	9					9	4	1	<u> </u>			22	<u> </u>	2	13		
	I .	. 95	616		2,495	2,375	1,129	189	2,552	860	266	1,12	69	258	1,088	12	89	661	164	217

DIX 22.

railway at close of the calendar year 1906.

(	ar.	wa	y ac			the c		1	•7 y	eur	10																			<del></del>
ſ	_			3′ 31	,, 	1	<del></del>	<u> </u>	ī —	T	1	<del></del>	7	7	3' 6"	1	<u></u>	1	<del></del> -	1	<del></del>	γ	7	<u> </u>	,	2'	<u>0"</u> -	1	<del></del>	İ
١	19	6 (s) & (f)	2 (g) to (m)	(a) & (b)	21 (a) to (f)	22 (a) to (j)	23	24	25	26	27	3 (b) & . (d)	2 (n) & (o)	1 (b) & (e)	30	9 (h) &c (i)	(g) & (h)	1	1 (c)	(d)	20 (c)	32	33	9 (j)	85	187	88	87	38	Items.
	M. R. V.	N.& B.C	R.M.	R. & K.	8. ſ.	8. M.	0.	B. B. L	B.	В. В.	o.	E.1: S.N.	D. & R.	E&R R.D.	S.	K. K. T. & N. D	M.D & T.K	M. R. W.	1 7	P. L. L.	W.	B. P.	B.	D. L.	D. H.	G.	H A.	H. 8.	J.	ļ
	3 2		{ 145 303	} 48	83 165	42 195	1 2	} 3	7	3-	3	{ 2 13	} 11	{ 6 23	}24	30	6	{4 1	}3	3	5	5	3	7	17	15	1,	4	7	1
ŀ	5	18	418	18	218	237	3	3	7	3	3	15	11	29	_	80	6	5	3	3	5	5	3	7	17	15	11	4	7	2
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		1	5 2		3						•••	 2						 3							 3	2			-	*. 4
1			*	4		12		1	1					2	4	3											1			5
4			13	2	14											,					1	1				1				6
١	3				3		1									•••					1									7
	3		108	6	15	44				1	1		1		12	8			2				.		18				-	} 8
		2		6				٠					6		1			<b>%</b>		•					1		- 1		"	)
İ	-		8	2	1 40	6	3		"	"			•••				"				3	2	- 1	- 1	ъ			"	"	. ,
1	5	2	48 34	8	3	54 12	"					6	•••		4			1				- 1					1			10
ı																							- [	1			]			)
١		2			42						٠												3						6	} 11
١			10		9			•	4			9		6					2	1		1	2			2	4	2	2	12
١													•••	, ···	1								-	1	•••		•••		2	18
١	3		87	6	28	37	1					٠			10			4							25	3		"		
١	3							'		 2	•••		•••					2	"	.		"	•	- 1	"	"		"	<u></u> [	14
1	30	"	51	8			2					2				"					"									- 15
- [														···										į			- 1		]	-
1			15	10		<b></b> .						2				5						2					3	2		16
1			12									•••																-		17
١				6				l														.	-							18
١	•••													•		•••			٠	3	- 1		7				- 1	:-	11	19
١			509	49	511	210	l II	15	2	11		25	6	14	•••	22		15			10	"	"		41	- 1		14		- 20
١	•••	26	200 5	26 20	15	53			21		1						10	18	8	-				"		:8				***
١	•••	···	82	20	28	39	1	ī		1		2						2											[	21 -
١			98	8		237	8								80	9						3				14			h	!
			47		146	19			2					82	8	G							-				-			- 22
1	••			9		2							••					$ \cdot $			-	1					- 1			
-	6	10	976	14	84	45	8	1		8	1	7	11	3	18	11	···	6		3		3	"	- 1		4	7	1	"	23
-	· <b></b>	4	•••	2	45	180		3				7	•••	15	""	1	7	•••	 2		4	1	3	"		6	2	1		24 85
١	•••	•••		28	6									"											3		- 1			36
	•••	3						<u> </u>					·.					2												27
	•••		5			6																								28
١		8	98		5	14																								29
	2	8	82	10	30	47	1						2	2				2		•••			-			5			-	80
	•••		27		81	22				-	***					8		ş	"					"					-	81
	•••							"	-			"								•	•		"		***		"			81 83
١	•••	****	<b>!</b> "		-	,"	-	"				***			"														8	84
1	***				]											<b></b>														85
١	,,,		,		10	1	1					1		1		6									8	2				. 86
	_	_	1,703	.	<u>                                     </u>			<u> _</u>	83	19	8	63	51	76	_	80	<u> </u>	53	9	8	18	35	 10		99	73	78	<del></del>	-	· 37
	55	1.	12,103	1	2,101	1 .,000	1-	1	1	1.	1	1	1	1	1	<u> </u>	1	1	1	1	1	)		ــــــــــــــــــــــــــــــــــــــ	-	)	i Herestori		1	erroreant.

Rolling-stock under different heads on each

1	GAUGE.					5′ 6″		4						8'	31"				-	-1
١	WACOII.												13	Γ	,	1	)			18
	Numure.	1 (a)	2 (a) to (f)	3 (a)	4 (a) (o (d)	5 (a) to (f)	6 (a) 10 (d)	8 (a) & (b)	9 (a) to (y)	1º(a) &(b)	11	12(a) &(b)	(a)	14(a) to (d)	15(a)	16	17(a) &(b)	3 (b)	8 (c)	(a) to (c)
rtems.	Railway.	B. N.	B,B &C.I.	E.B.S	E. 1.	0. I.P. & l. M.	M.	N_G.⊀. 	N. W.	0,&R	A. B	B & N. W.	В D.	B, G. J. P.	В.	D 	D.8.	E. B.	H. (4.)	J B.
	Goods gebieles.																			
88	Covered goods wa- {Ordinary . Military .			•				••• •••	 474	2,151 2,73.	100	200		 	625 75		 	310		6
39	Covered goods wa- Ordinary . Military .	2,408 1,278	1,513	1,382	°,391 	7,6-6	1,917	102	2,507 6,195			5,310	26:3	145	2,760		223		403 100	616
<b>4</b> 0 <b>41</b>	High-sided wagons, bogio High-sided wagons, 4-wheeled .	-	1,003	1	 2,110	:,5 <b>7</b> 8	 1,320	10 799	 1,112	•	25 1.7				16   G+		741	 ,	2 277	
42 43	Modium-sided wagons, bogie	 290	443						 						310	 6		*		
44	Low-sided wagons, Military .		95						102	16 374					115			54 		152 
45	Low-sided wagons, Ordinary .  4-whoeled. Military .	190 156	102 • 85	367	6,675 •	005 	220		151		300	467	<b>6</b> 6	565 	186		70	235 228	 	142
46	Cattle wagens	2,9 <b>9</b> 3	14	1	1,357 7		1 10		 21	1:0	 4 5			 6	166					 35
48 49 50	Accident vans	14 	14 	13  5	4.1	39	3 18		 			 2 )		2	:2			8 3 2		
51	Timber trunks	36	20	16		191	- 215	10	49		<b>3</b> 5	279	11	22	95		51	114	20	
52 53	Bolstor trucks Single	14 76	 4°0	74		50			271 		16 50				150			 50		
£4 55	Travelling oil tanks		20 25	28 8	60 	5t 11	45 10		51 72	12 1		G 		1	23			14 	1	
86 67	Travelling gas holders	5 11	8	7	3	17 57	12 15	2 2	15 52	8 17	8 15		 3		. 20		2	13	2 2	
84	Miccellancous	21	8	16	8	1	16	7	16	7	12	9	1	50	98			50	6	
<b>15</b> 9	TOTAL GOODS VEHICLES	7,633	5,130	4 059	07 8	12,166	1,918	1,058	2,812	5,58.1	2,016	6,021	4	1,0:8	5,263	. 10	1,001	3,776	897	992
			•							•	•	TCA	i Vei	CL	768 C	AR	RIAC	ES F	'TTI	ED
	Intermediate class  Composite, intermediate & 3rd class.		18		50									11				22		20 24
	Third class	40	93	19	256	100	F1			19			3	39	52					88
€1,	TOTAL .	40	113	30	3:0	100				19	19		3	53	57			22		152
					<u></u>	<del> </del>	j			CLAS	 В СА	RRIA	GE	8 PR	OVII	) ED	WII	H LA	TR	ine
	Intermediate class	26	18	] 14	6.		4		1:3	37	45		3	11	1			45		20
	Composite, intermediate & 3rd class.  Third class	34 69	1 94	31	60 274	57	64		96 562	21			з		33 72			40 257	68	24 68
. "	•		-	_	-		_			_	_		  -		-	-	<u> </u>			Ц
G1	Total .	129	113	117	398	171	162	64	791	219	89		6	53	105	"	13	342	68	132

DIX 22—concld.
railway at close of the calendar year 1906.

•				8' 83"											2' 6"									Π		5	3′ 0″			T
	19	6(e) &	2 (g) to (m)	20(a) & (b)	\$1(a) to (f)	22(a) to (j)	23	24	25	26	27	3 (b) & (d)	2 (n) & (o)	1 (b) & (e)	30	9 (h) & (i)	(g)	19	1 (c)	1 (d)	20 ,c)	32	323	9 (5)	85	5 (g)	86	87	38	Itoma.
v	M. R. V.	N & 8.C	В. М.	R.a K	S. I.	S.M.	υ. σ.	B. B L.	B. L.	В. В	C.	H.B. S.N.	G. D. & R.	H.A. B.D.	K.	K K T. & N D	M.D T.K.	M. R W.	М. В.	L. L.	P. W. L.	B. P.	T. B.	D. L.	D. H.	G. L.	H. A.	H. 8.	J.	, .
									0.17					150	20	40	0.			2						ŝ				,
		75 	471 	345		85			27					150	20	49	24	10		2					-				42	} 38
1	29		3,579	769	2,055	3,526	25	6		14		103	<b>3</b> 8	20	79	25		10	2		57	20	30		49		14	4		} 89
- 1	15	49	1,101		260	198			 5	2						13	24	9		· <del></del>						P0 2	10		29	40
1	25		134		789	170				6	11				25	19			<b></b> .				12		184	43	4	4		41
4	•••	6	150			140													A 2						•				-	42 43
			237	30	20				59		4		96	50				38		12									4	)
١		7	953													14			٠,.									-		<b>}</b> "
ı			1,200	143		438	10	19		12		<b>4</b> 0	73	30	30	69		••		2	8	21				10			3	} 45
						350								65		69								326						46
					6	28								<b></b>		10			<b></b> .			•••					-			47
					4	13 45									1								 2							48 49
١		1	35	2	7	13							1		1	2														59
١	•••	8	79	76	33	127 30		•••			•	24 110		23	4				•••		2				6				5	51
١						65																				1				<b>52</b>
		22			522				3							150			-		-					100				58
-	•••	4	21		24	8						 3						 1												54 55
						25					۱																			56
,	•••	•••	27	10	8	21			1						1				-									•••		57
	•••		1	"	5	20		"				···	2	"			"	,	""		8	""			8		•	***		58
1	70	171	9,007	1,361	3,891	5,362	35	25	94	34	18	280	210	310	161	431	48	68	12	16	71	41	50	326	254	237	32	8	78	59
1-	VIZ	'H	CLOS	ETS	FOR	FEM	ALI	 38.	j			1	1		·	\ <del></del>		J—				i		<b>!</b>	,	1				İ
١																														1
				16				-	4				-																	İ
	•••	22		29	55	68	15										1	-		"				-			-			
		22		45	55	63	17	-	4															-						60
ľ	A.C	00	MMO	DATI	ON,	INCL	פס	ING	(17	EM	60	CAI	RIA	GES :	FIP	TED	wi	TH	CLO	)SE	rs 1	FOE	FF	DMA	LE	8.		1	1	ł
• 1	5		51				2																[							1
	•••	5	81	16	26	121		-	4			2					4												-	
	•••	92	. 219	29	1 .	121	15	-			-						-	-				-	-	-	4	-	-	-	-	
	5	277	851	45	148	121	17	-	4			2				-	4		-			-	-		14			-	-	61
				]			L															-								

#### APPEN

Number of, outlay on, and

	GAUGE				5"	6'		1
. No.	Number.	1 (a).	2 (a) to (f).	3 (a).	(a) to (d)	5 (a) to (f).	6 (a) to (d).	8 (a) & (b).
Progressiv	Particulars.	B. N.	B. B. & C. I.	E. B. S.	E I.	G. I. P.	м.	N. G S.

### ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

Passenger engines	ons e			77 77 214 291 0·17 29,035 17,97 25,163 80 49 7,984 58 14792 8,729	\$ 87 1 88 132 2 22 0 0 25 25 18 25 21 1.227 20 ,251 (9 9 5 6.55 39	71 115 114 129 200 60 60 60 67 5,944 22 	150 8 158 802 4 788 946 949 92 126 24,7 3 103 60 68 8,920 105	823 9 86 2 9 2 9 31 26,945 17,855 20,542 73 49 6,210 177 3 0 7 3 10,967		5 56 56 56 56 56 517 56 518.692 51 57 .
-------------------	-------	--	--	---	---	---	---	---	--	--

### COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

36 Avonge under repairs of r newals at any one time	20 21 22 23 24 25 26 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29	Total value, in thousands of supees			38,182 42,:93 116 39 132 76,34		•••		1,28,73		188 1 189 0 11 0 05  0 19 0 19 0 54   41,868 119 17 7,38 2,42
---	--	-------------------------------------	--	--	---	--	-----	--	---------	--	---

### GOODS STOCK.

60 61 62 63 64 65	city in tons.  Queen Average load of a goods vohicle, loaded and empty, per mile Freight ton-mileage per vehicle, in thousands of tons. Average under repairs or renewals at any one time Total value, in thousands of rupees Total value per raile of line open  Grand total value of rolling-stock, in thousands of rupees	7:11 89 236 2.17,29 12,888	7·02 80 233 	7.85 60 224 	7:87 142 791 	7,02,05	13 90 5 09 78 196 	16 P 7 11 10 4 24,5 6,91 56,2
55 56 57 58 59 60	Average mileage run by each per annum Average mileage run by each per diem  (Covered wagens Open Average carrying capa- Covered wagens oity in tons.  (Open Open Open Open Open Open Open	18,388 50 8.23 8.31 15.07 16.99	11,791 32 6:94 6:56 14:44 14:53	7,815 21 7 70 7:48 13 05 15:95	18,528 51 7:82 6 73 15 11 15:06	17,676 48 7.62 6.86 14.74	12,673 85 7·50 6 61 14·87 18 90	19,29 7:36 6 86 18:91 16:91
50 51 52 53 54	Open Number at close of 1965 Timber trucks, including bolster trucks All other classes Total of all classes Number of all classes per mile of line open	3,725 50 81 7,632 431	2,308 20 85 5,180 5:90	483 90 110 4,059 8:15	10,142 242 18,775	4,059 291 160 12,166 4 30	1,762 185 71 4,916 3 35	80 1 7 1,05 80
4 5 6 17 18	Total of all classes  Covering wagons  Covering wagons  Covering wagons  Timber trucks, including bolster trucks  All other classes  Total of all classes  Covered wagons	7,879 253 253 3,776	5,105 27 2 2,717	4,053 61 26 35 6 8,376	17,495 143 1,110  27 1,280 8,391	12,6-4 140 20 20 162 7,686	4,918   2,900	1,00 !  16
89 40 41 42 43	Covered wagons Open Number at close of 1905 Timber tracks, including bolster tracks All other classes	3,776 3,172 50 81	2,717 2,081 20 87	3,315 509 125 104	8,248 9,032 215	7,546 4,039 241 178	2,00 1,763 1×5 71	16 75 1

DIX 23.
work done by, Rolling-stock.

5'	6"							3′	9}"						Ī
9 (a) to (g)	10 (a) & (b)	11	12 (a) & (b)	13 (a) & (b)	14 (a)to(d)	15 (a)	16	17 (a) & (b)	(b) & (c)	8 (c)	18 (a) to (r)	19	(e) & (f)	2 (g)to(m)	ra No.
N. W.	O, & B	<b>▲</b> , B.	B.&N.W.	В. р.	B.G. <b>J</b> .P.	В.	D.	D. 8.	E.B.S.M.	H.G. V.	J. B.	M.R.W.	N.& S. C.	R. M.	Pogrameir

# ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

 756 64 820 820 0 20   71 7,827 8,67,50 9,135	65 65 140 140 205 0 16 0 48,982 11,275 14,275 22,154 24,1 39 82 7,618 3,4 28,6 6,61	0 21 226 271 271 1 0 17 0 16,313 18,823 22,448 26,6 66 61	0 37 2 0 37 2 0 37 2 0 0 37 2 0 0 08 0 0 08 0 18,186 23,8 2 2 5,949 0 7,56 73,	28 223 2 8 31 2 2559 2 159 0.40 0.30 3167	22 4 26 26 0:30	63 5 68 74 8 82 150 0 223 25,157 19,25 21,947 63 63 3,479 30 	55 55 55 18,963 32 3,286 7,16,05 4,3,7	48 48 49 49 49 10 29,120  80 5,535 7 13,48 1,666	3 3 1 1 2 5 5 0 0 0 7 14 1 20 11 7 7 1 1 1 3 , 11 7 3 3 4 3 7 7 1 1 , 54 2 , 0 7 9	6 -6 12 6 6 6 6 18 11 0 22 12,725 36 1,334 457 5,595	145 303 303 448 021 24,812 18,996 30,678 52 4,175 52 
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### COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

2,399 153 2,552 0 0 0 4 0 0 26 0 0 23 0 61 57,913 54,163 33,634 51,395 141 224 1,59,18 5,620	853 7 860 018 0018 0028 0020 0 65 5.277 3.781 3.084 13.526 44,01 28 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.0	259 7 266 0· 4 0· 2 0· 02 0· 13 0· 13 0· 13 0· 13 3.2,6-4 31.17 <sub>0</sub> 24,569 24,569 27 	1,020 93 1,128 00-5 00-5 004 015 015 0273 62 419 81,275 42,224 55,71 153 32 366 	63 63 	255 255 0 06 0 01 0 03 0 30 0 13 0 56    52,060 88 22 25 8,08 1,774	985 53 1,018 0 07 0.6  0.42 0.23 0.77 24,512 30 912  35,45 32,683 90 26 11,2 58,82 4,389	12    2-40 	84 55 89 } 0:13 { 0:53 0:48 1:14     	691 	164 164 0 0 7 0 04 0 18 0 18 0 13 6 42 41,827 115 8 76 2,238	217 217 0°04 0 002 0°12 0°26 0°26 57,684 156	55 0 14 0 09 0 41 0 01 0 074	52 5 57 678 0 03 0 26 0 70 15,430 31,446 16,78 18,971 16,78 18,010 49 20	1,679 24 1,703  0 83  47,576 131 32 145	
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GOODS STOCK.

8,132 2,917 320 253 11,644 159 	4,681 	1,225 4:30 622 87 1,813 188 203 1,413 408 35 100 2,612 7,123 40 481 388 10-27 723 477 48 59 10-27 1	\$ 5,954 \$ 279	263 66 114 5 318 2063 66 14 2 27	2º88 70.5 22 23 1,048 298 22 23 1,048 223 6,200 6,200 6,200 6,200 17 3 72 8 18 7.35 7.44 2.86 18 28 12,53 2,751	3.691 9.8 8.99 164 5,155 1.00 3.94 1.038 4.02 11,636 5,240 3.92 11,636 8.91 4.92 4.62 3.91 4.93 4.93 4.93 4.93 4.93 4.93 4.93 4.93	10      	223 814 500 2 1,059  4 1 1 5 223 814 54 1271  	2,834 514 58 3,517 109 10 6 221 8,033 567 114 3,778 490 7,324 20 5-11 3 48 937 7 37 4 36 35 119 119 119 119 119 119 119 11	403 382 12 817 100 -20 	602 295 	29 25 1 55 15 15 29 40 17 094 4.78 5.60 7.50 11:60 	79 83 83 8 170 1 1 80 83 8 171 2 19 82 1792 1792 1792 1792 179569	5.153 2,677 79 100 8,009   2 5.151 2,677 100 8,007 45 45 45 45 433 9 62 12 45 77 70 219 	39 40 41 42 43 45 46 47 48 49 50 51 52 54 55 56 57 58 61 62 63 64 65
8,52,20 20,407	2,37,31 19,064	90,98 11,794	2,30,88 14,902	12,^8 7,668	28,17 6,191	9,22 71 16,622	Informa- tion not available	24,17 31,390	1,89.28 16,072	40,17 10,274	41,85 5,021	5,45 7,865	14,81 18,098	2,57,14 12,605	66 67

	GAUGE.		8′ 3	<b>}</b> "					2′ 6″		
e No.	Number.	<b>20</b> (a) <b>å</b> (b)	21 (a) to(f)	22 (a) to(j)	23	21	25	26	27	3 (b) & (d) (n	2 .) & (o)
Progressiv	Partionlars.	R. & K.	S. I.	9. M.	<b>v</b> . c.	B. B. L.	B. L.	в. в.	C.	E. B. S. G	D. 4 B.

ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

### COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

90 Number at 21 Number at 22 Number at 24 mile of 26 open. 27 28 29 Average mi 30 run by 31 fer annum 32 Fricht to 36 Average mi 37 Total vafta	close of 1986	one ti	of tons.		181 43 227 0 08 0 04 0 03 0 03 0 016 0 061    22 22 	1,099 .32 1,131 0 07 0 05 0 18 0 83 05,702 44,778 44,671 121 18 83 	1,053 3 1,056 0'05 0'05 0'32 0'20 0'61   32,742 90 20 48 	26  26 0 01 0 03 0 23 1 16 0 37   32,901 90 2 2	13 10 23    0.88  	7 26 83	24 -5 19  100 	3 3 3 3 3 3 3 3 4 5 6 .500 6 .500 3 1 77	63 63  0.71 	54 -3 -8 51  0:39  1,20
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### GOODS STOCK.

39 40 41 43 43 44 45 46 47 48 49 50 51 52 53 54 55 57 58 59 60 61	Number at close of 1995.  Number added later tracks, including bolster tracks.  Number added later tracks, including bolster tracks.  Number added later tracks, including bolster tracks.  Number added later tracks, including bolster tracks.  All other classes.  Covered wagons. Open Number at closs?  Inner tracks, including bolster tracks. Open All other classes.  Number of all classes of all classes.  Number of all classes or mile of line open.  Average unleage run by oach per diam.  Average name by each per diam.  Average carry: Covered wagons. Open  Average carry: Covered wagons. Open  Average carry: Covered wagons. Open  Average load of aggoods vehicle, loaded and empty, per mile	1,015 113 76 15 1,219 99 60  3 162 1,114 174 176 1,381 3.88 9,218 25 4.12 3.57 18.79 10.60	2,281 1,303 71 8,753 150 —12  138 2,431 1,381 71 1,881 2.87 11,889 3,891 2.87 11,88 3,891 7.94 7.94 7.43	3,700 1,044 267 207 5,218 165 224  6 1,020 267 213 5,362 3 20 11,808 3 20 11,808 3 20 11,808 3 20 7 7 9 5 6 9 5	25 110	6 19	7 15 39 1 1 62 20 51 -39  27 66  1 21 1 1928 4 1 21 1 1928 4 1 10 1 5 90 7 50	14 2 28 12 28 18 16 14 20 34 1.79	18	103 41 132 2791 2 1 103 40 134 40 134 5 280 3:15	55 152 9 2009 —17 17 1 38 169 3 210 1:59 
62 63 64 65	Freight ton-mileage per vehicle, in thomsands of tous Average under repairs or renewals at any one time Total value, i thousands of rupees Total value per mile of line open	27 32 34,46 9,767	45 216 	182 182 1,12,47 6,510	38 1 1,77 2,500	1,54 5,938		 1,86 1,030	128 1 12, 1,002	 	1.48 1,121
66 67	Grand total value of rolling-stock, in thousands of rupees. Grand total value of rolling-stock per mile of line open.	47,45 13,866	1,69,29 12,448	1,69,81 9,883	9.73 4,060	2 31 8,885	9,83 1 <b>2,</b> 603	2,56 14,423	40 3,883	Included with E.B.S By. 3 '1" gauge	4,21 8,189

DIX 23-concluded.

### work done by Rolling-stock.

					2′ <b>6</b> ″								-	2′ 0″		,	
(6) 8	k (e).	30	9 (h) & (i).	6 (g) &(h).	19	1 (c).	1 (d).	20 (c).	34	83	9 (j ).	35	5 (g).	86	87	38	8 No.
J. G.	. Е. D.	K. S.	K. K. T. & N. D.	M. D. & T. K.	M. B. W.	м. в.	P. L. L.	P. W. L.	В. Р.	т. в.	D. L.	D. H.	G. L.	Н. А.	н. s.	J.	Progressiv

### ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

6 6 9 4 233 29 0·10 1,5342 42 2,368 1	24 30 24 30 24 30 24 30 24 30 25 31 26 797 10,51; 31 51 79; 51 79; 6,76 7,06 11,366 5,364	0 8 0 0 8 0 0 14 0 14 0 15 15 16 16 17 18 19 10	9,256 6,6 	3 5 5 5 12 0.13 52 13,129 18 36 176		3 3 3 0·15 	7 7 7 1:13	181 17 17 0:33 18,723 38 2 3,09 6,058	15 15 15 15 0.08 10,510  29		4 4 4 4 20	0.22	1 2 3 4 4 5 6 7 8 9 10 11 12 18 14 15 16 17 18
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### COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

56 20 76 0-02 0-01 0-19 0-03 16,872 28,121 35,594 28,328 29,001 27,788 27	78 14 92 0°35 0°25 0°25 0°30 1°55 3,710 5,206 0.8,062 8,485 6,686 4 4.42 7,442	80 0.05 0.03 0.03 0.03 0.20 0.30 0.40 11,084 18,858 37,174 22,818 422,818 422,538 67 14,85 1,85	11 10 21 0·05 0·03 0·16 0·48 20,947 20,946 21,667 9,065 17,339 47 12 	53 0'34 0'39 0'39 0'39 2'56   8 1,40 6,783	9 0·06 0·04 0·02 0·10 0·06 0·28 11,397 8,566 17,003 23,515 11,716 15,526 43 12	8 0.04 0.02 0.13 0.33 3 4,441 16,094 6,202 10,129 28 12  31 1,245	18 18 0.05 0.05 0.03 0.03 0.03 0.46 {	25 25 0.07 0.04 0.08 0.45 0.11 0.75 70 2,092	14 1 15 0·15  0·45 0·15 0·75 	99 :::::::::::::::::::::::::::::::::::	97 22 99 0·48 0·54 0·08 1·90 	63 10 78   0:40 	66 12 78	20 20 20 20	23	19 20 21 22 24 25 26 27 27 29 30 31 32 33 34 35
--	--	---	---	--	--	---	---	--	---	---	--	------------------------------------	----------	----------------	----	--

### GOODS STOCK.

170 105 23 300  40 170 145 23 340 113 14,763 744 631 1468 1280	80 60	84 336  11 431 -10  8  74 388  19 431 827 4,550 12 450 12 450 12 450 13 864	12 12	20 47  1 68  20 47  1 68 328  3:25 3:25 4:75	4 8 12    4 8  12 0:37 6,283 17 5:00 5:06 9:00	2 14 16 2 14 18 0.05 3,822 9 6.98 4.08 9.04 7.38	58	20 21  41  20 21 124  275 215 500	30 18 2  50  30 18 2.50 2.50  	326 326 0 53 	44 179 6 199 248 5 12 	80 55 1 101 287 1 130 213 2:60 5:13 4:16	118	44  8  44 4.  2.75 2.75 5.00	42 29  5 76   42 29  5 78 238	89 40 41 41 42 45 46 47 48 48 49 50 51 52 53 55 56 57 58 59 60
8.83	2.80				4.18	8.48										61
40	10 9,58 5,028	8 11 4.83 8,660	2,68 6,102	 10 1,22 5,869	26  61 1,897	12  41 1,688	4 	 61 1,836	 	 	 3,75 7,856		 3,90 10,532	 1,03 5,150	::: :::	62 63 64 65
25,76 8,580	14,76 24,832	19,76 10,424	4,73 10,727	8,56 16,952	1,30 4,062	1,48 5,920	1,42 3,641	2,19 6,636	1,60 8,000		6,84 18,412	5,56 3,088	6,58 17,649	1,68 8,400	2,09 6,531	66 67

# APPENDIX 24. Rolling-stock fitted with automatic brakes at the close of the calendar year 1906.

Nu	MBER.		_	Lo	COMOTIV	Es.	Co	DACHING DING AL	VDHICLI L BRAKE-	ES VANS.	Goods	VBHICL BE CRAN	, EKCLU	DING
Main head.	Sub- bead.	Gauge.	RAILWAY SYSTEM. (Vide Appendix 38.)	Fitted.	Not fitted.	Proportion per cent, of fitted to total.	Braked.	Piped.	fittad	Propor- tion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proper- tion per cent. of fitted to total.
1	(a)	, (	Bengal-Nagpur	176	115	60.48	809	2	145	84.83	1,259	574	5,788	24.05
2	(a) to (f)		Bombay, Baroda and Contral	185	35	84.09	508	4	• 134	79.26	2	49	5,075	0.99
3	(a)		India. Eastern Bengal State	143	57	71.50	518	61	140	80.23		12	4,040	0:30
4			East Indian	495	451	52:33	1,618	80	797	68.06	414	78	18,252	2.62
_	(	9	Great Indian Peninsula .	,			1						,	
5	$\binom{a}{f}$ to $\{$	}``	Indian Midland	\$ 560	302	64.97	1,783	6	586	75 33		167	11,942	1.38
6	(a) to (d)		Madras	168	109	59.93	1,012	15	202	83.56	250	15	4,638	5.40
8	(a) & (b)		Nizam's Guaranteed State .		61		57	3	129	31.75			1,056	
9	(a) to (y)		North Western State	808	12	98 54	2,254	78	220	91.38	i	117	10,476	18-16-
10	(a) & (b)	ן ו	Oudh and Robilkhand State.	152	53	74.15	721	49	90	89.53	1	18	5,524	0.75
11		ĥ	Assam-Bengal	78	9	89 65	251	4	11	95.86	1	7	1,689	15.59
12		11 1	Bengal and North-Western .	96	175	35.42	470	2	656	41 84	1		6,302	1
13	•••		Bengal Dooars	C.	10		l	3	60	4.76		1		
14		li l	Bhavnagar-Goudal-Junagad-	1	37			"	255	7.0	"		345	
15			Porbandar.	152	107	59.69	493	33	512	En.n=	296		1,046	
	•••		Deoghur	1	1		493	03		50.67	296	14	4,920	5-98
16		li i	Dibru-Sadiya	l	2		"		12		"'		10	
17	•••	li i	1		26				89		"		1,092	· · ·
3	(b) & (c)	ŝ	Eastern Bougal State	121	29	80 67	427	40	197	70.33	ŧ	2	3,763	0.02
8	(c)	) in	Hyderabad-Godavarı Valley.	٠.	55		3		161	1.83		•••	895	
18			Jodhpur-Bikaner		48			2	215	0 92			992	
19	•••		Morvi	l	5			2	58	3.64			70	
6	(e) & (f)	li i	Nilgeri and Shoranur-Cochin	6	12	33 33	12		45	21.05	22		149	12.87
2	(g) to (m)		Rajputana-Malwa	76	372	16.96	174	79	1,450	14.86			7,080	
20	(a) & (b)	11	Rohilkund and Kumaon .	18	30	37:50	51	14	162	28.63			1,371	
21		li !	South Indian	93	155	37.50	258	2	871	22.99			3,883	
22			Southern Mahratta	48	189	20*25	118	3	985	11.46		<b>*</b>	5,341	
23			Udaipur-Chitor		3		۱		26				35	
24		h	Baraset-Basirhat Light .		3				23		l		25	
25			Barsi Light	3	1	42.86	26		7	78.79	1		92	1.07
26			Bukhtiarpore-Behar Light .		3			١.	19		<b> </b>		84	l
3	(d)		Cooch Behar including 2'6" gauge branches of Eastern Bengal State Railway.		15				63				. 280	
27		li i	Cutoh	l	3	· ·	j	"	3				18	""
2	(n) & (o)		Gackwar's Dabhoi and Raj- pipla.		11				51				210	
. 1	(b) to (r)	, e	Jubbulpore-Gendia, Mour- bhanj, Parlakimedi Light and Raipi r-Dhamtari.	22	13	62.86	51		39	58.06	265		103	72.01
30		11	Kalka-Simla	24		100.00	92			100.00	199	61		100.00
9	(h) & (i)	1!	Khushalgarh-Kohat-Thal and Nowshera-Durgai.		30				80				431	
6	(g) & (h)		Morappur-Dharmapuri and Tiropattur-Krishnagiri		6				21		1	1		
19	·	li	Morvi		5				53				48 68	
20	(c)	[]	Powayan Light	1	5				18				71	
32		11	Tarakeshwar-Magra Light		5				25	1			41	
88		IJ	Tezporo-Balipara Light .		3				15				50	
9	()	h	Dandot Light		7	1							326	i
35		11	Darjeeling-Himalayan		17			*	99	·			254	1
5	(g)	i.	Gwalior Light		15				73	1	1		237	
36		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Howrah-Amta Light	1	11	}	1	1	78	1		1	82	1
37		11	Howrah-Sheakhala Light		4				20		ļ	"	8	1
38	***	11	Jorhat	· '''	1		"	***	ı	1	"	" '	i	1
J)		٢	Joine		7		<u> </u>		22	<u>".</u>			76	
			Total .	8,419	2,626	56.26	11,709	482	8,862	57·91	5,149	1,109	109,078	5-4

# APPENDIX 25.

# Bolling-stock lighted by gas and electricity at the close of the calendar year 1906.

N	umber.		Railway sysynm.	Numb vehioles	or of co	sching or light-	Number	1 KODOZ-	
Main head.	Sub-head.	Gauge.	(Vide Appendix 38.)	Gas.	Elec- tricity.	Total.	coaching vehicles not fitted.	cent. of fitted to total.	Remarks.
1	(a)		Bengal-Nagpur	755	2	757	148	83.61	
2	(a) to (f)	li i	Bombay, Baroda and Central India	405	9	414	7	98.34	
3	(a)		Eastern Bengal State	486	2	4:8	224	68-54	
4			East Indian	1,485	6	1,491	192	88-59	
5	(a) to (f)	5' 6" 4	Great Indian Peninsula	} 1,370	60	1,430	69	95:46	
6	(a) to (d)		Indian Midland	1,032		1,032	164	86-29	•
8	(a) & (b)		Nizam's Guaranteed State	1,032	•••	121	. 60	06.85	
9	(a) to (9)		North Western State	2,002	3	2,005	284	87:59	
· 10	(a) & (b)	1	Ondh and Rohilkhand State	688	7	695	165	80·E1	
11	(11) & (0)	Γ .	Assam-Bongal	245	'	245		100:00	
12		ll i	Bengal and North-Western		189	189	939	1673	
13		11 1	Bengal Dooars				63		
14	,	ll i	Bhavnagar-Gondal-Junagad-Porbandar		23	 23	232	9.02	
15			Burma		26	26	944	2.68	
16			Deoghur				12		
17		l!	Dibru-Sadiya				89		
3	(b) & (c)	li 1	Eastern Bongal State	478	1		180	72.68	
8	(c)	3′ 34″ ≺	Hyderabad-Godavari Valley	114		114	50	69:51	
18		li " I	Jodhpur-Bikaner		112	112	99	53.08	
19		11 1	Morvi				55		
6	(e) & (f)	l) l	Nilgiri and Shoranur-Cochin				57		
2	(g) to (m)	II i	Rajputana-Malwa	l	 815	 815	888	47:86	
20	(a) & (b)	li !	Rohilkund and Kumaon		58	58	169	25.55	
21	(, - (-,		South Indian		106	106	996	10.47	
22	1	li l	Southern Mahratta	971	1		54	94.78	
23		]	Udaipar-Chitor				26		
24		h d	Baraset-Basirhat Light				23		
25		<b>II</b> I	Barsi Light		23	23	7	76.7	4
26		II I	Bukhtiarpore-Behar Light				19		
8	<b>(</b> a)		Cooch Behar including 2' 6" gauge bran- ches of Eastern Bengal State Railway.	1			63		
27	ļ	li !	Cutch				3	·	
2	(n) & (o)	11 i	Gaekwar's Dabhoi and Bajpipla			•••	51		
1	(b) to (e)		Jubbulporo-Gondia, Mourbhani, Parlaki-	52		 52	29	57:14	
30		2' 6"	medi Light aud Raipur-Dhamtari. Kalka-Simla		92	92		100.00	•
9	(h) & (i)		Khushalgarh-Kobat-Thal and Nowshera Durgai,	f			80		
							•		
6 19	(g) & (h)		Morappur-Dharmapuri and Tirupattur- Krishnagiri Morvi				21 53		
20	(c)		Powayan Light				18		
82			Tarakeshwar-Magra Light				25		
33		Į (	Tezpore-Balipara Light				15		
9	(i)	h i	Dandot Light						
85			Darjeeling-Himalayan				99		
5	ω)		Gwalior Light				73		,
86		2'0"	Howrsh-Amta Light				78	¥.	•
87			Howrah-Sheakhala Light	<u> </u>			20		
88		IJ	Jorhat				22		
	1		TOTAL	10,204	1,535	11,789	6,784	68-88	
	L	<u> </u>			1				

### . APPENDIX 25-A.

Statement showing the number of trains provided with means of communication throughout between passengers and guards and drivers on the 31st December 1906.

N	OMBER.								
Main head	Sub-head.	Gauge.	RAILWAY SYSTEM (vide Appendix 38).	Partioulurs. €	Mail.	Passen- gers.	Mixed.	Total.	Remarks,
3	(a)	] [	Eastorn Bengul State {	Total number of trains run Total number of trains fitted with communication	8	80 39	<b>5</b> 5	1 <b>4</b> 3 52	Vacuum brake alarm com- munication.
8	(a) to (f)	5' 6"	GreatIndian Poniusula	Total number of trains run  Total number of trains fitted with communication	12 1	39	73 	124 1	Chain Pass; communica- tion, English pattern.
3	(b) & (c)	] [	Eastern Bengal State {	Total number of trains run	4	7 3	51 	62 7	Vacuum brake alarm com- munication.
2	(g) to (m)	3′ 39″{	Rajputana-Malwa {	Total number of trains fit id with communication	8 6	18 5		76 11	Electric com- munication.
21	•••		South Indian {	Total number of trains run Total number of trains fitted with communication	8 4	30 	7 <b>4</b>	112 4	

### APPENDIX 25-B.

Statement showing the number of carriages provided with means of communication between passengers and guards and drivers on the 31st December 1906.

Nu	MBER.		İ						ding		
Main head.	Sub- head.	Gauge,	RAILWAY SYSTEM (vide Appondix 38.)	Particulars.	Jal.	2nd.	Inter.	Srd.	All other carriages including composites.	Тотаі	Bemarks.
		) (	(	Total number of carriages	26	29	26	399	476	956	Edward King's paten
1	(a)	1 1	Bengal-Nagpur	Total number of carriages fitted with communication.	1				1	2	stop train alarm sig
2	(a) to	] ]	Bombay, Baroda {	Total number of carriages	3	33	17	299	294	646	English chain system
	(y)		and Contral {	Total number of carriages fitted with communication.	20	ວ		•••	19	48	in connection with automatic vacuum brake.
3	(a)	i i	Eastern Bengal	Total number of carriages	15	16	45	224	419	719	Vacuum automati
J	(0)		State.	Total number of carriages fitted with communication.	9	9	16	58	78	170	nunication. Four teen carriages hav been provided with Edward King's stop train alarm signals.
		i I	(	Total number of carriages	89	77	88	971	1,270	2,495	Bamber's patent alarn apparatus.
4	""	1 1	East Indian }	Total number of carriages fitted with communication.	26	39			85	150	#.
5	(a)	5 6"	Great Indian Po-	Total number of carriages	98	145		872	1,260	2,375	Chain Pass: com
Ð	to (f)	li	ninsula.	Total number of carriages fitted with communication.	31	•••		6	21	48	munication, Eng lish pattern.
	ĺ	1 1	(	Total number of carriages	38	79		558	550	1,229	Antomatic vacuum
6	(a) to (d)		Madras	Total number of carriages fitted with communication.	1	••• '\				1	brake communica tion.
9	(2)	l i	North Western	Total number of carriages .	82	91	133	972	1,274	2,552	Vacuum brake con
	(a) to	1 1	State.	Total number of carriages fitted with communication.	64		5	15	136	220	munication, King device.
				Total number of carriages	40	33	39	323	425	860	Vacuum brake system
10.	(a) & (b)		Oudh and Robil- khand State.	Total number of carriages fitted with communication.	12	20		26	72	130	
		י	4	Total number of carriages	18	19	47	278	302	664	Vacuum automati
8	(b) &		Eastern Bengul State.	Total number of carriages fitted with communication.	12	13	13	62	45	145	brake alarm con munication. For carriages have been provided wit
				Motel number of activities	7	١.					Edward King's sto train alarm signals.
18	<b></b>		Jodhpur-Bikaner	Total number of carriages		6	17	94	93	217	Electric communice
		3′ 31″-		Total number of carriages fitted with communication.	7	6	17	94	93	217	
2	(g) to		<b>.</b>	Total number of carriages	108	87	51	859	598	1,708	Electric communication.
22	(m)		Bajputana-Malwa-	Total number of carriages fitted with communication.	108	40	45	483	300	976	vivil.
	1		1	Total number of carriages	15	28		672	416	1,181	

### **APPENDIX 26**

Builways on which points and signals were interlooked and on which block instruments were used for train signalling at the close of the calendar year 1906.

Nu	MBRD.	Gauge.	RAILWAY SYSTEM.	Total number of stations on rail-way.	7	TIONS AT WEIGH POINTS AND SIGNALS WESS INTERLOCKED,	STAT	ions at which block in- uments were used for train signalling.
Main head.	Sub- head.		(Vide Appendix 38.)	Total natation	No.	Name of system of interlocking.	No.	Name of block instru- ment,
1	(a)		Bongal-Nagpur	240	101	81 List and Morse's . 20 Experimental .	} 16{	2 Webb and Thomson's. 2 Dutton's. 12 Theobald's Train Key.
.2	(a) to (f)		Bombay, Baroda and Contral India	138	33	25 Mackenzie and Holland's.  8 Experimental .	} 85	59 Prece's single wire sema- phore. Does not give out a token or tablet. 26 Experimental.
8	(a)		Eastern Bengal State	129	35{	24 Ordinary double line interlocking. 11 Experimental	} 22	Pryce and Ferreira's. Token not necessary. Ferreira's. Token not necessary.
•	***		East Indian	414	217	110 English system 106 Dutton's 1 Experimental.	255	76 Neal's Patent Voucher. 37 Tyer's Tablet. 58 East Indian Eallway double line block instrument. 8 East Indian Hailway tablet.
	(a) & (b)	5'6"	Great Indian Peninsula	264	68	47 English system  18 List and Morse's  3 Experimental.	264	206 Proce's. Does not give out a token or tablet. At some of these stations two kinds of instruments are used. *85 Neal's.
5	(c) to ( f )		Indian Midland	148	17{	11 Wrench's 5 English system 1 Experimental.	<b>}</b> 46	Presco's. Does not give out a token or tablet.
6	(a) to (d)		Mudras	318	61.	37 Läst and Morse's	220	84 Winter's Block with starting semaphores. Does not give out a token or tablet. 16 Winter's Block without starting semaphores. Does not give out a token or tablet.
8	(a) & (b)		Nizam's Guaranteed State	45	$egin{array}{c} igl \{ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	24 Experimental 1 List and Morse's 1 Dutton's 293 List and Morse's	} }	120 Thoobald's Train Key 11. Tyer's Tablet.
9 10	(a) to (g)		North Western State	623	353{	27 Tappet	87	26 Tyer's double line block instruments.
11		, (	Oudh and Rohilkhand State	191	116	13 Experimental	} 2	Experimental.
12 13	:::	1 1	Assam-Bengal Bengal and North-Western	126 287			•••	*****
14		! !	Bengal Dooars Bhaynagar-Gondal-Junagad-Porbandar	29 64	- <u>"</u> 2	Experimental .	•••	400 mgs
15			Burma	236	24	12 List and Morse's .	} 13	7 Sykes'. 2 Tyer's Tablet. 2 Neal's. 2 Thoobald's Train Key.
16 17	:::	1 1	Dooghur Dibru-Sadiya	1 18	::			
3	(b) to (d)	1 1	Eastern Bongal State	145	1 (	20 List and Morse's .	} 20	Tyor's Tablete
8	(c)	1	Hyderabad-Godavari Valley	47	42	1 Experimental . List and Morse's .	)	
18 19	:::		Jodhpur-Bikaner	85 8		******	•••	*****
6	(e) & (f)	8' 31" {	Nilgiri and Shoranur-Coohin	32	1	Experimental	12{	6 Winter's Blook with start- ing semaphores. Does not give out a token or tablet. 6 Theobald's Train Key.
2 20	(g) to (m) (a) & (b)		Rajputana-Malwa	295 61	101 {	87 Sydney Jones'.  14 Experimental.  Experimental.	} 45{	42 Tyer's Tablet. 3 Experimental.
21			South Indian	243	35 {	25 List and Morse's . 7 Dutton's . 3 Experimental .	} "25{	24 Winter's Block and Ticket issuing. 1 Experimental. 96 Winter's. Does not give
23 28	***		Southern Mahratta	244 7	1	Experimental 4	106	out a token or tablet. 6 Roberts' Key Staff. 4 Theobald's Train Key.
		5	Baraset-Basichat Light	n	"÷		***	
24 25 26 27	:::		Barsi Light Bukhtiarpore-Behar Light	15				*** ***
2	(n) & (o)		Cutch Gaekwar's Dabhoi and Rajpipla	2 32	=	Country made		*****
3	(b) to (e)		Jubbulpere-Gondia, Mourbhauj, Parlaki- medi Light and Baipur-Dhamtari.			Country indice	***	*****
9	(k) & (i)	2'6"	Khushalgarh-Kohat-Thal and Nowshera- Durgui.	21				
80 6	(g) & (h)		Kalka-Simle Morappur-Dharmapuri and Tirupattur- Krishnagiri.	21 10	:::	111 910	<b>**</b>	5++406 841>6+
19 20 82 88	(6) :::		Morvi Powayan Light Tarakeshwar-Magra Light Tezpore-Balipara Light	2 8 16 8		******	 	000 1.1. 01-000 000 1.00 000 000
85	75	h d	Darjeeling-Himalayan	11	1		\ <i>*</i>	*****
5 86	(g)	200	Gwalior Light Howrah-Amta Light	23 18		******		400.000
87 86	***	IJΙ	Howrah-Sheakhala Light Jorhat	19				*****
. <u></u>	L	1 .	Total	4.717			1.168	

### APPENDIX 27.

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1902 to 1906.

Ī			SOURCE			DESC	RIPTI Co	ON O	F FUEL MED A	WIT	H ACT	UAL QI R TON.	UANTI	TY	(Calcu	lated (	on in i	actual	
١	App. 38.	Calen-	NAME.	TANCE O	GE DIS- ARRIED LES. stance is	Fork	IGN CO		lndi	AN CO			WOOD.		reduce the rai	d in ter so of 1 s of wo	rms of c	oal at	Bewares,
	Ry. system, vide	dar year.	of the sources of supply is for coal only. Wood was supplied from various sources.)	from the of supply the p	ecurces y or from laces of very to	Quan- tity in tons.	In- cluding freight.	Ex- cluding freight.	Quantity in tone.	In-	Ex-	Quan- tity in tons.	In- cluding freight.	Er-	Per train mile.	l'er en- gine mile.	1,000 freight ton miles.	1,000 gross ton miles.	·
	2	3	4	5	6	7	8	9	10	111	12	13	14	15	16	17	18	19	20
	B. C.	\begin{pmatrix} 1902 \\ 1903 \\ 1904 \\ 1905 \end{pmatrix}	Bengal .	$   \left\{     \begin{array}{c}       162 \\       162 \\       \hline       162   \end{array}   \right. $	  Amalga	mated w	Rs.	Rs	8,466 10,623 9,789 tern Be	Rs. 6:27 6:00 5:67 ngal S	Rs. 3.00 3.00 3.00 tate r	  ailway.	Rs.	Rs	51·47 51·10 51·24	41.10	1,368:09 1,278:70 1,113:51	201·02 256·13 186·82	
	B. N.	1902 1903 1904 1905 1906	Bengal and Umaria	821 288 228 219 227					113,180 134,066 148,725 177,960 199,707	\$129 \$171 5152 516 540	2:48 2:13 2:58 2:34 2:43	103 <b>2</b> 06 219 287 163	5-60 4-20 	5·60  	59-81 65-95 67-95 71-81 78-55	53:37 57:33 58:65 61 15 61 09	759:43 775:46 754:68 646:19 624:02	178:58 199:42 200:80 195:34 192:58	
-	J. G. E.	(1902)   1903     1904 }   1905     1906	Bengal	603 617 620 451		  			191 3,165 5,706 9,329	763 10:31 10:18 7:11					64 85 56 20 54 3 3 66 15	47.63 45.53	1,135-88 1,178-58 983-05 1,422-65	344.98 300.75	
	М. В.	${1905 } {1906}$	Bengal	{ 188 188	:::	:::	:::		417 347	4·69 4·84	2·28 2·43	<u></u>	:::	:::	24·01 32·97		1,265 94 1,852 78		
	P.L. L.	(1902) 1903 1904 } 1905   1906 ]	Rengal	603 567 495 495 495					350 362 361 354 296	7:96 7:40 8:70 8:52 8:67	2:37 2:12 3:46 2:28 2:43				41.56 44.43 44.19 43.24 35.56	42.38	5,545.54 3,873.00 2,685.67 2,375.43	627:00 512 19	
	R. D.	1908 1903 1904 1905 1906	Bengal	480 463 443 442 442		  			554 683 785 856 780	6·41 6·07 8·12 7·95 8·10	2:37 2 12 2 46 2 28 2:43				23:31 26:61 29:43 30:89 28:99	26:35 29 08 30 41	1,260:15 1,486:37 1,168:36 1,091:26 1,126:17	437*75 403*C0 369*67	
1	B., B.& J.I.	1902 1903 1904 1905 1906	England, Bengal and Singaroni.	128 121 129 148 115	   105	7,477 10,384 13,545 12,621 28,692	20·00 19·33 19·62 16·87 19·37		65,559 63,172 67,666 75,769 64,635	15:98 14:16 12:92 12:33 12:95		2,063 2,226 2,344 2,494 2,491	3-27 3-00 3-00 3-06 3-27	 	58·11 57·58 59·27 57·81 57·18	48·99 48·16 49·22 48·43 47·42	513:66 514:46 536 53 514:00 478:62	148:09 152:36 149:83	1
G	D. R.	1902 1903 1904 1905 1906	Bengal.	{ ::: ::: :::		  	  		1,039 1,417 1,246 1,384 1,833			21 70 83 207 79		  	24·18 25·50 25·39 27·05 28·91		::: :::		
	1.B S.	\begin{pmatrix} 1902 \\ 1903 \\ 1904 \\ 1905 \\ 1906 \end{pmatrix}	Bengal	167   156   182   180   188		 	 	 	67,891 69,266 69,974 90,396 119,032	6·10 5·65 5·02 4·82 5·81	3·48 2·61 2·39 2·48 2·81	 			60·86 72 02 72·78 73·38 80 20	50°20 49 11 53°49	863°33 975°41	212.78 206.85 232.28	
	E. B. S.	1902 1908 1904 1905 1905	Bengal and Assam.	291 2F0 285 281 299		  			42,838 47,247 49,991 48,662 57,527	9-82 6-52 6-09 6-06 6-33	4.32				42-62 41-07 45-84 46-8× 48-90	35 65 36 77 36 52	898-88 844-98 872-27 805-30 867-58	239 44 231 02 227 78	
*	O.B.	1902 1903 1904 1905 1906	Bengal and Assam.	407 85 72 75 71		:::			785 980 1,271 587 856	9·86 9·45 9·77	9·04 9·40 9·11				29-95 29-76 36-86 17-59 20-40	21.50 30 57 14.61			
	E,I.	1903 1903 1904 1905 1906	Bengal and Umaria	260 256 244 245 257		*** *** ***			481,247 476,581 468,271 505,916 532,758	4·19 •4·05 4·01	2:00 1:97 1:92				63-92 65-74 06-47 69-74 68-79	51 97 51 66 52 07	457·12 406·88 431·67	151·16 187·59 145·77	

# APPENDIX 27-continued.

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1909 to 1906—contd.

•				SOURC	ES OF S	UP-	DES	ORIPI	NON OUR	OF FUE	L WIT	'H AC'	TUAL C	UANT	TY	Cor	(SOMP	LION IN	LB6.	
		App. 88.	Calen.	NAME. (The name of the	AVERAG TANCE C ED IN I (The die is rock	ARRI- MILNS. Stance		IGN CO		Indi	AN COA			VOOD.	r tun	quant reduces	ity of o sed in t the rat	on the s coal, and terms of e of 1 to: come of w	wood coal of	● Remabes,
	Number,	By. system, vide	dar year.	sources of supply is for coal only Wood was supplied from vari- ous sources.)	either from source supply of the pla delivery eral sto	on the os of r from oes of to sev-	Quanti- ty in tons.	In- cluding freight	Ex-	Quanti- ty in tons.	In- cluding freight.	Ex-	Quanti- ty in tons.	In- oluding freight	Ex-	Per train mile.	Per eu- gine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	
•	1	2	3	4	5	6	7	8	9	10	11	12	18	14	15	16	17	18	19	20
•	St. 3.4	G. L. P.	1902 1903 1904 } 1905 1906	England, Bongal, Bingareni, Uniaris, Nerbudda aud Warora.	294 327 304 304		303  202 329 <b>6</b> 35	Rs.   	Rs. 12:87 18:54 16:64 17:91	425,936 456,791 463,917 453,411 477,265	Rs. 8 38 8 17 8 39 9 25 9 59	Rs. 5-98 6-07 6-45 7-37 6-75	4,515 4,439 5,117 4,896 4,456	Bs.	8:81 3:91 3:58 3:51 4:00	66·79 68·43 68·91 67·13 68·43	58·11 59·65 60·50 59·09 59·73	719:69 798:03 776:00 755:75 751:29	193·68 206·32 205·09 200·52 185·91	o
		G. L.	(1902) 1903 (1904) 1905 1906)	Bengal and Moh- pani.	750 535 535 535 535			 	••• ••• •••	1,400 1,617 1,990 2,559 2,818	16.00 13.28 13.62 13.37 (a)	2.75 8.25 3.75 3.75	11 24 27 25	: ::::::::::::::::::::::::::::::::::::	1	35:03 38:30 36:13 41:73 43:86	35:03 36 00 34 10 38 81 40:45	: <u></u>	:: :: :: ::	(a) Reduced to Bs. 1013 per ton from 15th November 1906.
•	6 (a) to (d)	м.	(1902) 1903 1904 1905 1906	England, Bengal and Singa- reni.	313 333 191 352 350	14 27 38 24 36	 4 :::	£1 82	28·49	97,546 112,647 130,755 156,312 157,081		5·25 5·12 8·95 5·15 5·70	108,529 96,577 59,148 42,059 31,115	4:97 4:97 4:81 4:48 4:84	4·68 4·42 4·01 3·98 4·09	68:64 73:02 70:78 74:96 74:98	57.65 60.89 58.69 63.85 63.74	974·72 1,069 81 946 28 674·82 895 19	227 03 240:40 224 48 221:69 228:97	
,	8 (e) to (h)	N. S. C. M. D.	1903   1903   1904   1905   1906	England, Bengal and Singa- reui.	241 688 148 207 	16 18 21 24 	1,875 1,662 2,480 2,517 2,580	31.67 29.00 25.35 21.38 25.18	*27.57 *29.17 *22.54 20.58 21.33	 11 183 284 1,463	13.60 14.31 12.48	5·12 8·95 5·15	8,315 5,889 5,116 4,502 6,168	4·43 4·61 4·49 4·62	4·09 4·25 4·04 4·12	72:38 61:42 61:30 60:50 49:85	54 18 52 45	4,899.75 2,409.43 2,605.63 2,637.63 3,1916	654:46 809 85 423:49 424 76 455 45	* Including sea freight from England.
(	8 (a) & (b)	K. N. G. S.	\begin{pmatrix} 1902 \\ 1903 \\ 1904 \\ 1905 \\ 1906 \end{pmatrix}	Singareni	103 133 132 132 84 86		  			30,215 26,967 26,276 24,900 26,919	6 27 6 27 5 81 5 59	4.50 4.50 4.68 4.69	250 203	5.98 5.83 	3 25 1/14		56:75 51:91 50:87 48:19 47:98	567-37 547-72 533-22 514-05 504-29	173:81 160:45 158:74 154:58 153:51	Of Bengal coal only.
,	8 (c)	Н. G. V.	(1902)   1903     1904 }   1905     1906	Singaren	341 847 847 291 266		::: :::		::: ::: :::	14,442 14,610 14,809 16,686 15,688	8 90	6.62 5.58 4.76	205		5.56	40 12 30 66 40 86 99 50 37 59	35 55 36 85 35 70	1,031.64 986.72 825.63	201 9	1 237 to Rs. 300 and 3 Khost and Dandot b coal between Rs. 7 and
	(S) (B) (C)	N. W.	(1902)   1903     1904     1905     1906	England, Bengal, Dandot, Bhagun- wala and Khost.	[1838   1838   1838   1838   1838		7,206 3,736 +1650 +12,373 2,872	##	20.61 19.00 ††	258,111	\$\frac{\pi}{\pi}\$	(g) (g)	122,825 216,095 163,15 76,586 77,12	7 5.81 1 5.35	1	52 84 52:12 57:16 59:82 62 82	46.47 50.12 52.10	55778 481/27 547 06	155·7 156·9 172·0	mari Re. 12 00 and vis Chasiabad Re. 14 58. 4 5 Bengal coal from Re. 1 208 to Re. 3 50 and Khost and Dandot coal
	9 (h) ds (i)	K. K. T. & N. D.	(1902)   1908   1904 }   1905   1906	Bengal and Dandot.	{ :: ;		   12	::: ::: :::	::   ::   ::	1,235 2,788 2,788 2,731 2,726 3,548	##	:: (b) (d)	166 199 276 13: 7:	5.85		25 16 21 31 19 72	17.88	2,072·3 3,:62·4 1,882·2 1,243·4 1,763·9	5 435.4 1 385.2 14 801.9	during those years.  ‡‡ Bengal coal vid Kiamari Rs 11'08 and vid Ghaziahad Es.  1482.
	10 (a) &	0 & B.	(1902) 1903   1904   1905   1906	Bengal	674 595 603 603 603	***				98,775 108,040 119,278 131,444 142,799	7·76 7·46	2 1 2 1 2 1 3 2 1 3 2 1 3 3 2 1 3 3 3 3		::		51.68 54.81 55.39 59.17 61.69	46.99 47.69 50.26	849.58 791.59 5 919.40	179 4 192 8	and Khost and Dandot coul between Rs. 698 and Rs. 13.
<b>پ</b> ر	11	A. B.	1909 1903 1904 1905 1906	Bengai and Assem.	105 120 120 156 249		#** *** ***			18,661 15,682 22,837 81,778 87,185	7·92 7·64 7·45		2,71: 1,91: 			48:55 43:06 43:86 47:94 52:13	6   96-76 9   36-09 1   38-93	903:31 913:9: 1,063:10	5 245°2 4 235°3 6 265°0	and Rs. 12 27.
	12	B. & N. W.	(1902) 1903 1904	Bengal.	252 250, 248 260 289	25 95 18 18 71	**************************************			71,240 87,652 97,638 97,424 111,478	6·11 5·61 5·51 5·55	3·04 2·78 2·41 2·43	2,766 4,783 1,147 808	4-22 4-28 	4.2	2 38 00 8 49 9: 5 52 62 5 47 86	38 16 41-78 13-95 13-95 39-26	821-93 825-63 830-76 850-3	210 2 3 225 0 4 228 5 5 228 5	and vid Ghaziabad Rs. 15.85. (d) Bengal coal from Rs. 2.25 to Rs. 4.25 and Khost and Dandot coal ba-

# APPENDIX 27-continued.

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1902 to 1906—contd.

1	_[		SOURC	es of si	JPPLY.	DES	CRIPT	ION O	F FUEL	WITE D COS	I ACT	UAL QU TON.	JANTIT	Y			rion in i		
	App. 38.	Calon-	NAME. (The name of the sour-	AVERACE OF IN MI	Arkied Les.	l	10N CO	AL.	נטאו	IAN COA	L.	W	700р.	,	quan reduc the	tity of ed in to rate coal to	coal, and erms of c of one to 2\frac{1}{2} tons ( ood.)	wood oal at	Paratra
	ride	dur year.	ees of supply is for coul only.	rockone from the of supply	d cither sources	Ouan-	Cost p	or ton.	Quan-	Cost p	or ton.	Quan-	Cost p	er ton.			Per	Per	Remarks.
; ;	Ву. вувtеш,		Wood was	the place livery to storas Coal.	Boverat	tity in tons.	In- oluding froight.	Ex- cluding freight.	tity in tons.	In cluding freight.	Eze cluding freight.	tity in tone.	In- cluding freight.	Ex- eluding freight	Par train mile.	Per en- gine mile.	1,000 freight ton miles.	1,000 gross ton miles.	
1	2	3	4	5	•	7	•	9	10	11	12	13	• 14	15	16	17	18	19	20
,	B. D.	\begin{pmatrix} 1902 \\ 1903 \\ 1904 \\ 1905 \\ 1906 \end{pmatrix}	Bongal	•	{	••• ••• •••	Ra.	Rs.	2,196 3,023 3,471 3,652 3,876	Rs 12-33 11-22 10-60 10-67	Rs. 2·75  	::- ::- :::	Rы.   	Rs.	40°16 31 33 30°14 30°52 35°56	33 92 29 83 28:05 28 78 32:95		  	*Prices are given at the place of delivery which is the place of storage.
4	В. G. J. P.	$     \begin{cases}       1902 \\       1903 \\       1904 \\       1905 \\       1906     \end{cases} $	Eng- land, Bengal and Palana	52 54 53 52 52 53		1,19 <b>1</b> 813 2 5 	23·23 23·24 23·23 23·23 		4,966 6,027 7,531 8,010 9,050	18:00 15:44 14:13 14:07 13:54	  	74 80 86 83 91	8·88 7·73 7·50 7·50 8·03		29:77 30:26 31:20 32:05 33:45	27:45 27:82 28:37 29:03 30:25	913·30 800·61 774·69 816·07 840·55	174·C4 170·38 173·11 179·85 186·52	,
5)	В.	(1902)   1903   1904 }   1905     1906 }	Erg- land, Bengal and Burma.	120 100 128 150 162	   56	3,114 908 909 948 83	26·75 21·36 21·22 21·21 21·21		62,124 72,740 78,584 95,711 94,731	12:57 10:63 10:17 10:33 10:70	 	55,474 66,406 52,977 28,903 22,912	3:95 3:81 4:544 5:06 4:74		52:32 51:98 49:98 50:38 45:51	42:51 42:70 41:42 41:49 87:66	972:47 1,087:55 981 89 959:94 836:51	255:40 258:16 240:27 237:11 211:50	
3	D.	\[ \begin{pmatrix} 1902 \\ 1903 \\ 1904 \\ 1905 \\ 1906 \end{pmatrix} \]	Bengal	{	••• ••• •••	   Informs	  tion r	 ot ava	400 393 501 ilable	5·62 4·06 5·50	3·00 2·25 		a.  		61·37 56·55 71·80 	61:37 56:55 	 	::	w
7	D. S.	1902 1903 1904 1905 1906	Азват	•		 			4,616 3,983 4,538 5,012 6,664	8:50 8:50 8:50 8:50 8:50	8·50 8·50 8·50 8·50 8·50	26 12 10 4	2·08 2·56 1·71 2·22	1·28 2·00 1·71 2·22	51:64 43:67 51:88 49:79 55:07	36·75 29·46 33·39 32·06 36·34		111111111111111111111111111111111111111	,
8	J. B.	(1902)   1903     1904     1905     1906)	Bongal and Palana.	467 358 314 651 581	  		:: :: ::		18,231 22,420 27,832 21,689 28,369	11:59 11:98 10:84 11:27 12:39	5:55 7:36 6:13 5:30 8:02	4,981 120 152 155 163	4 34 4 38 3 62 3 90 3 71	4·34 4·38 3·02 3·90 8·71	47:63 52:50 59:31 51:51 48:96	49.61 55.34 48.39	1,018.95 1,187.75 876.54	297·67 246•73	
9	M. R. W.	1902 1903 1904 1904 1905 1906	Bongal.	†386 29 †386 445 †386	 	::: ::: :::		:::	1,622 1,511 1,777 1,796 1,419	23·74 21·20 17·51 18·34 17·25	12:35 11:04	21 80 53 62 23	7:50 10:66 8:27 4:77 10:89	10.66 8.27 4.77		23.32 23.06 31.55		 	† This distance is by rail; the distance by sea is 637 miles.
g) 2	R. M.	[1902] [1903] [1904] [1905] [1906]	Bongal and Singa- roni.	722 725 702 780 803	  	, 			113,360 95,725 109,754 134,200 145,037	16·57 15·79 14·39 14·15 15·26	5 74 6 03 4 20 4 03 4 77	2,183 2,615 2,481 2,055 1,126	5·00 5·00 5·00 5·00	5.00 5.00	37.60 38.08 40.27	32.62	474.48 496.38 495.11	164-80 161-48 169-98 171-88 174-98	
(g.e.)	R. & K.	1903 1903 1904 1904 1905 1906	Bongal	677 677 606 605 612	  			**	2,068 1,792 1,719 8,942 8,749	13.52 11.46 13.63 11.03 10.85				3·27 8·47	80.91 32.25	25·28 25·25 126·28 34·79 36·55	619:87	178·56 183·90 237·60	
90	P. W. L.	1902 1908 1904 1905 1906	Bengal	655			  		  24	11 03	2:35	1,440 1,226 1,400 1,308 1,520	:::	8:05 8:26 3:59 8:59	21·31 20·89	17·81 19·96			
1	8. I.	1902 1903 1904 1905 1906	Bennal and Singa roni.	82 83 81 79	24				58,273 60,096 68,680 72,314 73,541	18·11 12·18 11·40 11·39 11·83		10,782 10,516 11,295 9,477 5,587	4.00	  	\$6*44 37*71 38*21 86*90 \$6*38	84·23 34·79 88·74	774-08	205.4	

# APPENDIX 27—concluded.

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1902 to 1906—concld.

			SOURCE				DESC	RIPTI QUAI	ON OF TITY ( COST	CONSU	MED.	A ACTU	ΛL		Cor	SUMPT	nion in i	.Bs.	•
	de App. 38.	Calen- dur.	(The name of the sour-	AVERAGE TANCE CA IN MII (The disc reckoned from the	REIED ES. tance is cither sources	,	ion co  Cost p		Indi	AN COA	r.	٠.		or ton.	quant rodu at	ity of c iced in the cat f goal t	on the real, and terms of one co 2; ton vood)	wood ton	Remarks.
Number,	By. system, ride		Wood was	of support of delivers of delivers of delivers of delivers of the Coal.	places ory to	1	In- cluding freight.	Ex- cluding freigh 9	Quan- tity in tons.	In cludins freight	Ex- cluding freight.	Quan- tity in tons.	ln- cluding freight,	Ex- cleding freight	Per train mile.	Por en- gine milo.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	٠,
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
22 a) (j)	я М.	\[ \begin{pmatrix} 1902 \\ 1903 \\ 1904 \\ 1905 \\ 1906 \end{pmatrix} \]	England Suga- reni and Bengal.	403 351 316  365	96 74 72 82 79	133  2,418	18 88  18 08	Rs. 18:88  15:00	33,506 18,492 40,327 43,125 53,037	R4. 13:67 14:25 13:99 13:68 13:60	Rs. 5 25 8 10 8 30 8 95 6 38	62,422 65,629 69,209 70,137 <b>74,743</b>	Rs. 5 64 5 44 5 32 5 36 5 -37	4.00	39 11 40 71 37 79 37 04 39 38	34 71 36:27 33:28 32 82 35 07	804-00 803-88 7139 718-13 744-54	219:75 201:83 200:65	**
23	U. C.	\[ \begin{align*}		875 977 1,087 1,087 1,087		  			893 863 701 762 90 <b>6</b>	18·23 16·71 19·00 19·00	4-62 3-65 2-25 2-25 3 75	3 4  11 10	4-36 7-00 	 7 00 :::	38:50 37:37 :0:32 31:91 37:09	25·51 29·88	942:41 1,438:32 1,551:44 1,1:7:88 1,033:95	167 86	
25	В. L.	(1902)   1903   1904 }   1905     1906	Singa- reni.	{ 441  273					77  159 289	14-50	5 50  	635 566 790 742 1,102	5:00 4:97 6:19 6 19 7:10	5 30 4 97 6 19 6 19 7 19	31:90 40:75 94:59 10J:82 43:65	92 82 99 93	1,733 86 1,016 65	664 00	
27	C.	{ 19 <b>9</b> 5 } { 1906 }		:::			•		123 215	17·25 18·00	***	2 3	24·50 21 50	:::	64·16 29·71	61·16 29 71	3.76	3 35	,
<b>3</b> 0	K. S.	1903 1904 1905 1906	Bongal	1,021 1,018 1,016 1,016 904		 			238 5,166 5,189 4,917	20:00 21:00 17:50 18:15	2·25 2·25 2·25 4·00	144 13 3	12 19 	 14 00	46°43 69 46 71°18 77°29	66 77	7,984-98 6,500-13 5,407-71	1,185:26 942:22 893:18	٠, ١
82	B. P.	1902 1903 1904 1905 1905 1906		126 157 157 157 157 157			  		979 960 1,083 1,128 1,428	4 33	2.03				25 20 25 27 26 92 28 53 84 24	25:37 36:92			,
83	Т. В.	1902 1903 1904 1905 1906	i <b>1</b>	{ ::: :::	:: ::: :::	 	::: :::	  	398 523 580 643 673	11 81 18:10 13 50			 ::: :::		26:76 05:40 38:52 38:85 40:41				-
35	Д. Н.	1902 1903 1904 1905 1906	Bengal	S		## ## ## ##			3,422 4,666 4,697 5,025 <b>4,7</b> 9 9	7.84	9·12 2·50 2·25		 	:: :: :: ::	40 81 58:23 41 23 44:68 46:08	53·28 40 83 44 68			12 miles from Steamer Chat to Jorhat ; 180 miles from Ledo to Moriani.
38	J.	{1903 1904 1905 1906	grassA }	{ 11 12 •	 				778 890 861 946	13 61 13 61 13 61			;;; ;;;		88·15 34·61 35·90 41·76	:::		=======================================	t Excluding the Bukhetiarpore-Buhar, Banas ghat-Krishusgar, Thaton Duylozaik, Howrah-Amfa
	To				:::	21,469 17,696 17,432	i		2,091,99 9,203,68 2,447,84	r	:::	402,44 497,18 395,29	5	::- ::-	:::		:::	===	Howrah-Sheakhala Light railways,  ‡ Excluding the Bukhtiarpore-Behar Thatén-Duying a the Howrah-Anta and
-	741	1905	.		:::	18,280 87,280			2,668,42 2,878,28		*	253,09 248,22		:::		:::			Howrah-Sheabhain Light railways. S Excluding the Dec- shur and Barasot- Basirhat Hayse and the railways amod in the remark 1

# APPENDIX 28.

# Coal mined in India during the calendar years 1885 to 1906.

	1			QUANT	TTY MIN	 ED IN E	cn P	BOVINCE.	l i	- 1			Quantity of Indian coal con-	QUANT INDIAN C PORTED	OAL RX-	QUANT FORBIG IMPORTS INI	N COAL
YEARS.	Bengal.	Central Prov- inces.	Assam.	Central India.	Nizam's term- tory.	Punjab.	Kash- mir.	Balu- chistan.	Raj- puta- na (Bika- nor).	Mad- rus.	Bur- ma.	Total.	sumed by railways in	Fo Indian ports, excluding Burma.	To ports outside Indis, includ- ing Burma	From United King- dom.	From other countries.
385.	Tons. 1,123,700	Tons. 119,116	Tons. 43,707	Tons. 7,698	Tons.	Tons.	To <b>n</b> a. 	Tony,	Tone,	Tons.	Tous	Tons. 1,294,221	Tons. 486,716	Товя.	Tons. 500	Tons. 778,813	Tons, 40,659
B86 .	1,186,902	117,287	70,859	13,539								1,388,187	470,675		199	698,492	41,652
887 .	1,319,090	126,981	89,302	15,197	3,259	7,528		411			 	1,561,063	488,774		315	786,149	43,01 <b>9</b>
<b>8</b> 88 .	1,380,591	157,768	101,528	41.580	13,082	11,249	,	2,803				1,708,903	551,770	available.	15.796	785,776	20,463
889 . *	1,541,356	144,165	110,676	52,956	59,646	22,835		8,208	,			1,916,172	715,210	is not ava	89,972	717,024	52,190
390 .	1,620,245	137,022	145,708	77,812	125,486	10,677		15,511				2,168,521	654,829	Information is not	26,336	631,725	21,927
891.	1 <b>,7</b> 17,122	141,736	154,208	69,711	111,668	60,714		10,368		20	<b></b> .	2,318,577	797,112	ជ	4,515	726,069	17,844
302 .	1,920,050	132,005	164,050	88,623	119,601	66,352		13,284		61	3,670	2,537,696	\$65,492		15,725	629,374	23,120
393 .	1,902,866	195,118	161,120	91,318	157,121	77,294		20,091		502	9,938	2,562,001	924,900		52,302	616,319	18,066
364 .	2,035,934	140,195	169,418	102,807	240,525	66,467		21,753		1,297	12,111	2,523,907	1,062,748	147,813	154,082	675,013	57,119
395 .	<b>2,716,15</b> 5	122,776	172,717	118,179	292,915	72,493		25,158		1,737	17,289	2,540,01 <b>9</b>	1,119,621	162,276	211,407	773,675	15,458
396 . 397 .	3,037,920				262,681	79,017		26,257			12,093			389,812		524,420	93,21
98.	3,622,090	101,620			394,622			13,372	511		6,975	4,066,294 4,608,196		731,742 737,689		210,257 297,076	31,20
899 .	4,035,265	156,576	225,623	164,569	401,216	81,835		15,822			8,105	5,003,260	1,560,771	672,311		496,451	112,06
900 .	4,078,492	172,642	216,736	164,489	169,291	71,083		23,281	9,250		10,228	6,118,692	1,858,061	1,030,709	711,874	91,710	43,939
901 .	<b>5,487,</b> 585				421,218			24,650	12,094		12,466	6,635,727	1,956,631	1,157,892	£45,953	112,519	79,108
902 . 903 .	6,259,336 6,861,212				455,421 362,733	55,973 43,704	1,060					7,424,402 7,438,386		974,602 1,295,318		198,574	20,778
904 .	7,063,680						1		21,764 45,078		9,206		2,447,341				
<b>9</b> 05 .	•7,294,168	147,265	277,065	157,701	454,294	62,622		*41,725	42,964			*8,417,799	2,668,424	1,635,268	1,144,680	147,760	50,024
906 .	†8 <b>,096,39</b> 3	92,848	285,490	170,292	467,924	73,009		42,164	32,372		1,223	†9,261,714	2,878,281	1,630,798	1,394,732	199,215	27,150

Bevised.

# APPENDIX 29.

# State Collieries worked by Railway Companies or by the State.

Part	iculars,	AZ	RBAREE ND (PORE.	WAB	ona,	Мон	Pani.	Dan	IDOT.	Кн	08T.	PRE	npur BBRD Actory,	Remarks.
		1905.	1906.	1905.	1906.	1905	1906.	1905.	1906.	1905.	1906.	1905.	1906.	
Samo	of owner.	East In rail	dian way.	Sta	to.	Great Peninsu wa		North State	Western railway.		Western railway.	€rn	West- State way.	, e
<b>Ja</b> pito	l outlay Rs.	22,34,832	22,85,521	13,24,899	12,94,360	6,58,458	7,02,912	2,13,486	2,03,177	8,05,815	3,05,769	80,701	72,613	East Indian railway. Capital outlay approximate and made up of t
L	arge coal . Tons	512,150	£10,044	93,306	21,711	19,192	24,214	28,624	28,947	4,959	852			Purchase mom Rs 3,05,154, whi represents half t original cost
Si Si	nall coal . Tons	19,226	26,060	29,709	7,613			25	140	296	73	•		buildness, plant, of paid to the Ei Indian Railway Co pany on valuati and the capital of penditure incurr
§   E1	ack coul . Tons	86,628	87,875			*3,806	●8,298 •	14,513	11,571	28,885	31,575			from let Janus 15.0. Warera.—The docres
T	otal. Tons	618,004	623,979	, 123,015	32,3.7	22,998	27,503	43,162	43,661	3 <b>4,</b> 140	32,590	6,162	6,541	in the capital out in 1908 was due sinking fund credi The working of t colliery has be abandoned from 1 May 1900.
)uant	ity issued Tons	627,020	649,950	122,843	32,498	23,888	25,944	43,162	43,661	24,140	32,500	0,162	6,541	Mohpani.—Purchas by the State we affect from the July 1904.
iross	earnings Rs.	11,20,509	10 81,830	5,67,546	1,77,470	1,16,059	1,44,457	3.25 <b>,4</b> 0\$	3,40,218	3,01,444	2,73,610	€8,426	75,223	Dandot.—The decre in the capital out in 19:6 was doe to preclatum on the co- of works completed to the and of the y and to a reduction the Stores Impa
Vork poni	ing ex- ses Rs.	11,20,809	10,81,309	3,80,477	1,30,513	1,68,915	1,77,997	3,21,843	3,45,7(9	2,93,050	2,05,382	67,075	71,149	Khost.—The deered in the capital out in 1906 was due the charge for cap
let co	rnings or Rs.			1,87,069	46,927	-52,750	-33,51v	3,561	-5,191	8,391	-21,772	1,951	4,073	enthy being erree by annual depration.  Haranpur.—The crease in the cap
cap:	ntoge on isl.			14-12	3 65			1.66		2.75		1.67	5 61	outlay in 1108 due out rely to amount written for depreciation.
of p	genumber ersons em- red daily.	8,370	6,900	967	413	<b>6</b> 80	200	1,860	1,840	719	701	7	12	
rais	or of tons ad per per- employed.	74	90	125	78	84	35	32	33	48	46	2	1	
Tum! son	per of per- skilled.	1	1					1		5	5			
Fami son	per of per- s injured.	10	10	٠	2	1	1	.4	4	1	1			*

# APPENDIX 30.

Accidents and casualties to trains on railways treated as one System during the calendar years 1905 and 1906.

	Accidence to the contract of t	od to d ments oction			Tot	.,	(Fig.	op bire in a in in or in or	nece italie	i. B+ We	- 1		Nom serv	RER OF			Total, Olab		
Disconferion.	83 of In it Rail: Act, I 1830, seri accide	ian ways X of r.e	Oth accide		numbe accide	rof	Kitt	ed.	In	jarce	1.	<b>k</b> ill	od.	Inju	red.	Kill	ed.	Injur	od.
Name of the Control o	1905	1906.	1905.	1906.	1 905	1906.	1905.	1906.	1908	5. 19	906.	1905.	1906.	1905.	1906.	1905	1006.	1905.	1906.
1. Collisions between passenger trains or parts of passenger trains.	5	5	4	6	ย	11		1	;	30	24		3	5	6		4	35	30
2. Collisions between passenge trains and goods or minoral trains, origines, and vehicles standing foul of the line	١	40	31	26	ر 51	66	1	3		3  {	77 4	} 1	7	24	36	2	10	87	117
3. Collisions between goods trains or parts of goods train	11	20	57	71	63	91	1			4	121	1	8	36	31	2	8	40	81
4. Collisions between light engines	3	1	32	43	::5	41				.		2	, <b></b>	5	5	3		5	5
5. Passonger trains or parts passonger trains leaving the rails	of ie . 74	74	83	79	158	153				5	17		1	10	4		1	15	21
6. Goods trains or parts of goods trains, curines, etc. leaving the rails.		7 9	365	385	<b>87</b> 2	394		1			4			5	4		1	5	8
7. Trains or engines travelli in the wrong direction through points	11	9 11	85	143	97	15				17				6				23	. 1
8. Trains running into statio or sidings at too high a spec	ne d	5 4	27	24	32	21	3			7	•••		:	3, a			3	10	
9. Trains running over eattle on the line	0 1	4 6	3,274	3,632	3.288	3 ,63	»			6	5	1		1	2	1	1	1	6
10. Trains running over of structions on the line	). 1	.5 18	. 165	162	180	18	0 K	- 1	1 6		15 12	15 5	3	2 1	•	4	6 4	, ,	31
11. Trains running throug gates at level crossings	th	1	27	3:	28	3	5		3		•		-			2		3	2
12. The bursting of boilers engines	of ·			2	۽ ا	2	-		İ		***		-		\\ \	-			
18 (a) The bursting of tall etc., of engines	ios,	1	. 29	8 28	B 29	9 28	8								-	.		-	
Carried over	. -  -	165 1	6,4.1	4,88	4 4,61	9 5,0	32 {	2 4	6	122 15	13	15	7 .	24 8	7 * 1	24 :	13 8	9 28	4 251

# APPENDIX 30-concluded.

# Accidents and casualties to trains on railways treated as one System during the calendar years 1905 and 1906—concld.

Brought forward  18. The failure of machinery, springs, etc., of ongines  14. The failure of tyres  15. Ditto of wheels  16. Ditto of axles  17. Ditto of brake ap-	Indi Railv Act, 1890, seria accide 1905. 165	ways IX of ie, ous	1905. 4,434 819	1906. 4,894	B.COIC	1906.	1905.	1906.		ured.	Kil	lođ.	Injt	ared.	Kil	lled.	Inj	ared.
13. The failure of machinery, springs, etc., of ongines .  14. The failure of tyres  15. Ditto of wheels .  16. Ditto of axles .	3	188	4,454 819	1,894	1,619	5,082	{ 2		1905.	1906	•		·	'	1		L_	
13. The failure of machinery, springs, etc., of ongines .  14. The failure of tyres  15. Ditto of wheels .  16. Ditto of axles .			819			-	К	6		1 44,	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.
springs, etc., of ongines  14. The failure of tyres  15. Ditto of wheels  16. Ditto of axles  17. Ditto of brake ap-				756		758	J, ,	1	122 15	137 21	} 7	24	97	94	13	39	934	252
<ul><li>15. Ditto of wheels .</li><li>16. Ditto of axles .</li><li>17. Ditto of brake ap-</li></ul>			13			100					1	1	1		1	1	1	
16. Ditto of axles .			ı	5	13	5				<b></b>				3				3
17. Ditto of brake ap-	10		7	16	7	16						• 						
17. Ditto of brake ap-			59	71	69	77								1				1
paratus".		1	4	6	4	7												
18. Ditto of couplings	2	6	330	353	832	359				29	<b></b>	1	5	4		1	5	33
9. Ditto of tunnels, bridges, viaduots, culverts, etc.			4	3	4	3												
20. Broken rails	1	1	158	130	159	131							1	<b></b> .			. 1	
21. The flooding of portions of permanent-way	39	36	106	158	145	194												
22. Slips in outtings or oni- bankments	7	10	55	64	62	74				1	2	1	1		2	1	1	1
3. Fire in trains	2	3	209	150	211	153	1	3	1	2		• 1		1	1	4	1	8
24. Fire at stations, or involv- ing injury to bridges or viaducts	2	10	57	<b>5</b> 2	59	62	1	2			<b></b>	3	1	5	1	5	1	5
25. Other accidents	18	31	605	721	628	752			17	{ 25 ₁	} 5	8	9	40	5	8	26	66
Total .	249	202	6,874	7,379								- 1		- 1		1		

Numerical return of servants of all races employed on each railway system (open lines only) and

N.	omber.				NUMBER	OF SERV	ANTS BEP	LOYED.		
	MBEN.	RAILWAY SYSTEM.	Europ	eans.	Eurasi	BILA.	Nati	yes.	Tote	d.
ain ad.	Sub-head.	(Vide Appendix 38)	1905, Rovised.	1906.	1905, Revised.	1906.	1905, Revised.	1906.	1905, Revised.	1906.
1		Bongal-Nagpur	. 417	515	754	726	23,757	28,494	24,958	29,768
2	(a) to (f) &	Bombay, Barods and Central India	237	229	271	217	15,783	16,384	16,291	16,880
-	(n) & (o).	,, ,					2,1.00	,	10,222	,
3		Eastern Bengal State	. 327	379	411	517	26,752	30,516	27,490	31,41
4		East Indian	. 1,506	1,531	1,026	1,064	76,497	82,221	79,029	84,81
										•
5	•••	Great Indian Peninsula	. 1,103	1,138	998	971	65,617	67,710	67,718	69,81
6		Madras	. 268	308	1,616	1,660	24,386	25,667	26,270	27,64
8		Nizam's Guaranteed State	. 72	90	382	390	7,634	7,854	8,088	8,33
9	•••	North Western State	. 888	986	718	743	61,660	64,357	63,266	66,09
10		Oudh and Robilkhand State	. 317	322	359	311	21,273	21,860	21,949	22,49
,,		Assam-Bengal	. 85	84	95	103	5,774	6,311	FOE	
11 12		Assam-Bengal	. 166	173	195	237	20,022	21,779	5,954 20,383	6,49 22,18
13	•••	Bengal Dooars	. 4	4	100	4	1,170	1,167	1,178	1,17
14		Bhavnagar-Gondal-Junagad-Porbandar	1	7	30	30	2,661	2,742	2,700	2,7
15		Barma	. 209	160	636	607	13,673	15,105	14,498	15,8
16		Deoghur			1	1	66	66	67	20,0
17		Dibru-Sadiya	. 9	9			983	1,053	992	1,00
18		Jodhpur-Bikaner	. 11	11	6	4	3,515	8,771	3,532	3,78
19		Morvi	. 1	1	2	2	388	388	391	3:
2	(g) to (m)	Rajputana-Malwa	. 444	462	<b>189</b>	513	28,072	28,154	29,005	29,1
20		Rohilkund and Kumaon	. 27	25	19	31	3,450	3,571	3,496	8,69
21		South Indian	. 157	158	748	717	15,028	15,119	15,933	16,0
22		Southern Mahratta	. 188	170	422	459	15,003	15,358	15,613	15,9
28		Udaipur-Chitor	. 2	2			369	362	370	3
24		Baraset-Basirhat Light			1	1	169	153	150	
25	1	Barsi Light	2	2	1	6	1	1		8
26	ł	Bukhtiarpore-Behar Light		l	ł	`	111	i		,
27	1	Cutch		1	1		55	1	1	
30		Kalka-Simla	. 16	1	I		312	1	į.	8
89	1	Tarakeshwar-Magra Light			1	1	225	228	1	2
83		Tezpore-Balipara Light		1 1	2 2	2	188	190	192	1
35		Darjeeling-Himalayan ,	. 2:	24	10	4	865	891	809	
86		Howrah-Amta Light		s   1	5 1	1	870	448	376	4
87		Howrah-Sheakhala Light				ļ	104	95	104	İ
38		Jorhat	·  '	1			214	23	215	2
				_	<del> </del> -		-			
		Total	. 6,52	6,850	9,181	0,320	436,328	468,108	452,033	470,

DIX 31. \* the amounts deposited by them in the Provident Fund at the close of the calendar year 1906.

	And	UNT DEPOSITED	IN PROVIDENT	Fund.	I	
Number of	depositors.	Amou	nt at credit on th	e 31st December 1	905.	Remarks.
Voluntary.	Compulsory.	Voluntary.	Compulsory.	Bonus given by the Railway.	Total to depositors' credit.	
		Rs.	. Rs.	Rs.	Rs.	
286	4,338	1,99,773	12,12,186	9,23,107	23,34,066	
2	<b>8</b> ,119	26,549	17,22,852	18,14,663	35,61,061	Excludes the Provident Fund transactions of the Godhra-Rutlani-Nagds railway which are included with those of the Bajputana-Malwa railway.
175	5,938	<b>25,0</b> 00	14,35,741	12,35,708	26,98,449	
7,128	10,420		•		1,40,67,987	Amounts under voluntary and compulsory deposit and bonus given by the railway are not available.
3	8,057	1,027	1,03,78,634		1,03,79,661	The bonus given by the railway is included in the amount at the credit of voluntary and compalsor, depositors.
117	6,510	1,30,543	19,57,419	15,90,157	36,78,119	dolustinis.
•••	1,440		6,01,902	5,45,136	11,47,038	•
449	8,941	1,00,269	35,50,260	31,88,433	68,38	•
148	3,302	31,351	10,08,543	8,63,411	19,03,308	
410	1,122	•••	2,81,284	1,61,239	4,43,523	
10	1 1	. 69,161	8,70,907	8,21,083	17,61,156	
	180		33,741	27,294	61,038	
170	1	35,874	2,05,640	1,50,087	3,91,601	,
	3,038		9,66,962	7,71,160	17,38,022	
•••						
•••		•				
33	396	6,577	91,009	81,933	1,79.609	
	77		19,415	2,801	22,216	
•	•	•	•	•	•	* Information not available owing to destruction records by fire.
1	564	128	1,71,078	1,46,872	8,18,068	
22	2,951	8,048	12,33,921	7,05,838	19,47,807	,
•••	3,768		13,92,399	7,06,442	20,98,811	
•••	38		7,710	3.596	11,306	
		,				
	19		993	ļ	1,833	"
						l
	18		1,559	1	2,686	, ,
		KO	7.516	 8 000	16.474	
1	1	50	7,510	4		
		,				
	145		1,34,930	76,912	2,11,842	
	86		18,541	1	19,660	
	12		2,26	1	3,731	
	1	1	1	1		
					}.	
8,55	5 67,482	6,85,888	2,73,09,84	1,38,34,974	5,58,47,606	1.

# APPENDIX 32.

# Number of men enrolled in Railway Volunteer Corps on the 31st December 1906.

				ENR	OLLED ST	TRENGTH	τ.			
Nu	NBRB.	Corps.	I	EFFICIENTS.		Non-	of volun- teers of all nation- alities	servants	Sergeant Instruc- tors fur-	Remarks.
Main bead.	Sub- head.		Officors.	Non-Com- missioned officers.	Volun- teers.	eMeionts.	in corps, including servants on con- struction work.	on open lines of railway.	nished by the Army.	
1	,	Bengul-Nagpur	36	118	1,012	22	1,188	1,271	10	
2	(a) to (f) & (n) & (v)	Bombay, Baroda and Central India— First Bottolion, Bombay, Barodo and Central India Radway Volunteer Rifles		92	442	3	555	146	5	
3		Eastern Bongal State	18	94	712	10	183	896	4	
4		Fast Indun	/ 76	207	2,097	36	2,416	2,598	* 18	
5		Great Indian Peninsula— First Battalion, Great Indian Pen insula Railway Volunteer Rules	47	193	1,261	11	1,512	2,109	13	
6		Madras	. 48	197	1,286	32	1,560	1,974	12	
8		Nizam's Guaranteed State— Hyderabad Volunteer Rigles		3 23	152	30	213	480	3	t
9		North Western State	. 4	140	1,031	53	1,271	1,729	12	
10		Oudh and Robilkhand Stato— Oudh and Robilkhand Railwa Volunleer Rifles		5 74	433	10	539	ין נויי	4	
		Oudh and Robilkhand Raduay R		2 6	59		6'	7 633		
		1. "		1	1			2		
11			. 1	8 27	229		26	8 187	3	
12		Bengal and North-Western - Bengal and North-Western Railwa Volunteer Rifles United Provinces Light Horse, Goral	2	2 45	260		32	7 } 410	5	
14			- 1	2 7	31	5 :	1 4	5 )	1	
•	`	dar – First Batlalion, Bombay, Baroda m Central India Radway Volunte Ryles, F. Company	ıd er	1	7 2	2	3	3'	1	
1	!	[	:	28 8	63	5 2	8 77	4 76	7 9	
31	9	Morvi First Baltalion, Bombay, Baro and Central India Radw Volunteer Rifler, F. Company	14 ty 		1	1		2	3	
;	3 (g) to (n	Second Battation, Bombay, Baro and Central India Railw	ny i	29 9	1 65	6	7 78	33 97	5 11	
2	0	Rohilkund and Kumaon- Bollgal and North-Western Railw Volunteer Rifle Corps	ay		2 9	32	2	36 4	9 1	
2		South Indian		27 7	2 50	3	5 6	07 87	5 8	
2		Southern Mabratta		25 13	10 60	8	7	63 69	29 7	
1		Udaipur-Chitor— Bombay, Baroda and Central In- Railway Volunteer Ryles	lia 		1	1		2	2	*
;	32	Tarakeshwar-Magra— East Indian Railway Volunteer R	isles			1		1	1	
	35	Darjeeling-Himalayan — Northern Bengal Mounted Ri "A" and "B" Troops	tles,	1	3	18		17	83	
		Total		457 1,6			18,6			

# APPENDIX 33.

Strength and cost of the Police force on each Railway system (open lines), and the amount of compensation payments on account of claims for goods lost or damaged, for the calendar year 1906.

-	EBER.	n payments on account			Pobrios	OF THE T	OTAL ANNI RE RAILWA	JAL CORT	Cost of	Compen- sation payments	,
Main bead.	Sub- head.	Bailwargststem. (Vide Appondix 38.)	Subordi- nate officers.	Consta- bles and men.	Supervi-	Consta- bles and mon.	Contin- gencies.	Total coat of force to the railway.	fores to the railway per mile open.	on account of claims for goods lost or damaged.	Rumanus.
			Average No.	Average No.	Rs.	Rs.	R	Rs.	Rs.	Ra,	
1		Bengal-Nagpur	15	836	17,953	59,554	4,953	82,460	40-16	48,387	
2	(a), (c) to (f) & (n) & (o).	Bombay, Baroda and Central India.	79	578	28,051	63,939	7,625	99,615	115-66	44,334	
8		Eastern Bengal State	100	<b>97</b> 6	780	75,401	85	76,269	57·41	1,63,695	
4		East Indian	78	2 105	61,395	1,58,638	<b>4</b> 9,257	2,68,290	110.49	73,872	
5		Great Indian Peninsula	38	1,660	68,6C7	1,41,539	21,351	2,31,557	77 26	1,03,657	•
6	🛉	Madras , .	23	<b>7</b> 83	14,506	89,091	9,674	1,13,271	71:10	6,834	•
, 8		Nizam's Guaranteed State	3	391	17,634	40,011	4 200	61,843	83·27	1,330	j.
9		North Western State	•••	1,563		1,50,992	1,116	1,52,108	35 31	1,45,271	
10		Oudh and Rohilkhand Stato .	9	659	5,728	<b>4</b> 7,752	1,742	55,223	41.70	20,537	
11		Assam-Bengal	5	229	8,603	17,767	1,814	29,184	<b>36·5</b> 6	3,020	
12	•••	Bongal and North-Western .	20	655	3,130	59,754	1,171	64,055	41-43	6,329	
13		Bengal Dooars		10		1 <b>,06</b> 3		1,069	<b>6</b> :98	401	•
14		Bhavnagar-Gondal-Junagad-Por- bandur.	26	123	16,787	11,198	6,607	54,592	75:93	472	
15		Burma,	87	480	29,937	75,697	18,109	1,23,743	92:31	16,229 *	
18		Jodhpur-Bikaner	3	41	1,860	4,217	614	6,700	8.04	6,072	•
9	(b) & (y) to (m).	Rajputana-Malwa	117	1,022	37,200	82,443	10,142	1,29,885	59 <sup>-</sup> 55	59,947	
19		Morvi	6	14	<b>65</b> 8	5,695	240	6,533 <sup>.</sup>	69.66	22	
20		Rohilkund and Kumaon .	12	172	1,741	13,548	1,487	16,776	47:27	1,207	u.
91		South Indian		247		71,953		71,953	52-89	5,088	
22		Southern Mahratta	14	753	92,790	87,916	8,750	1,19,486	71:47	8,619	<b>,</b>
25		Barsi Light	1	7	256	772	25	1,058	13:41	58	
80		Kalka Simla	1	44	829	2,901	40	8,270	55:01	682	
		l .	<u> </u>								,

APPENDIX 34.

110

Transactions of the Fine Funds for the calendar year 1906.

No	MBER.			Assets.					Dianu rsem	ents,			and and and and and and and and and and
fain ead.	Sub- head.	RAILWAY SYSTEM. (Vids Appendix 39.)	Balance on 31st December 1906. (Revised)	Fines and bonus for- feited during 1906.	Interest on balance.	Total.	Hospitals for sick em- p.oyes.	Compassionate allow- ances.	Schools.	Recreation clubs.	Miscellaneous.	Total.	Balance on Sist December 1906.
			Rs.	Rs.	Re.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Ra.
1 2	 (a),(r)to	Bengal-Nagpur  Bombay, Baroda and	28,718	18,439	745	47,902			1,235	4,300	6,595	12,130	85,772
~	(f) & (n) & (o).	Bombay, Baroda and Control India	2,622	5,890	64	8,576	107	607	240	860	5,622	7,436	1,140
8		Eastern Bengal State	12,878	10,501	392	23,771		242	8,510	6,183	1,659	11,594	12,177
4		East Indian	1,06,719	16,481	3,072	1,26,272		233	2,319	18,035	24,420	45,007	81,265
5		Great Indian Peninsula	16,641	15,829	594	33,061		4,067	1,120	2,432	15,330	22,949	10,112
6		Madras	1,06,978	10,454	4,100	1,21,532	105	10,327	2,759	114	17,380	80,631	90,848
8		Nizam's Guaranteed State	9,410	6] 2,584	391	12,325			120		772	8,2	14,433
9		North Western State	17,446	21 993	594	40,000		148	8,165	10,704	3,863	28,180	16,853
		Oudh and Robilkhand	8,309	1		40,033		14,	0, 100	609	3,537	4	1 14,521
10		State	6,009	10,083	275	14,667	•••		·	6110	0,007	4,146	114,021
11		Assam-Bongul	9,662	10,753		20,115		130	66 j	3,816	7,193	11,800	8,615
12		Bengal and North- Western	90,083	13,878	1,4°4	1,05,445		63	1,125	1,593	<b>5</b> ,186	7,967	97,478
13		Bengal Docars	1,618	657	41	2,316	,		14.:	50 <b>5</b>		647	1,669
14		Bluvnagar-Gondal- Junagad-Porbandar			***			100		# <b>9</b> 0	678		r hod
		1	6,120	694	196	7,210		100		639		1,412	5,798
15		Burms	6,999	20,758		27,757		50	2,571	7 369	13,095	23,085	4,672
18	١.	Jodhpur-Bikaner .	6,810	2,724		9,534			2./5	733		918	8,576
19	1	Morvi	1,549	45	Informs	1,594 tion not	 «vailable	owing to	dostruction	n of recer	ds by fir	1:9 e.	1,47
	to (m)	1											
20	'  ···	Bohilkund and Kumaor		3,019	983	33,581			•••	940		940	32,64
21	·   ···	South Indian	1,48,049	6,970	4,390	1,60,008	153		561	8,893	1,330	11,865	1,48,14
22		Southern Mahratta .	1,766	4,653	39	6,4:8	9	200	1,291	2,425	475	4,400	2,05
23	3	Udaipur-Chitor	349	C8		417						•••	41
24	•	Baraset-Basirhat Light		78		78					79	78	
20	3	Bukhtiarpore-Behar Light		31		84					34	34	
36	)	Kalka-Simla .	547	396		943				210	23	263	68
35	•	Tarakeshwar-Magra Light		13		18	13					13	-
88	3	Tezpore-Balipara Ligh	16	67		83	-		56			. \$6	2
8	5	Darjeeling-Himalayan	196	108		299				150	27	177	15
36		Howrah-Amta Light		223		223					223	228	
3	/	Howrah-Sheakhala Light		39		89					89	89	
31	в	Jorhat	878	1	1	1	1				120	1	8

# APPENDIX 35.

# Railway and Railway Aided Schoffs at the close of the calendar year 1906.

					RAILWAY SCHOOLS.											RAILWAY AIDED SCHOOLS.					
NOEBER.			Railway			ATTENDANCE,				CONTRIBUTIONS.					Expen-		AVERAGE DALLY ATTEND- ANCE.		RAILWAY GBANT.		
		SYSTEM. (Vide Appondix 38.)		schools.	Children.		Apprentices and workmen.		Ву	By Railway.		Ру		diame.	chools.		bra	,		Remarks,	
Main head.	Sub-head.				Number of 8	Num- ber on the	Average duily at- tend-	Number on the rolls.		Gov.	From Reve- nue.	From Fine Fund.	school Total	Total.		Number of schools.	Chil- dreu.	Apprentices workmen.	Rove- nue.	From Fine Fund.	
٦	-=-	-						,		Ra.	Rs.	Rs.	Rs.	Rs.	Rs.				Rs.	Rs.	<del></del>
		В	. 5 E	uropean	6	241	156		,	4,127	3,500	400	4,853	12,580	12,232	3	63		900		
1	•••	N	r. 5 N	ativo .	3	214	194				875	835	905	2,615	3,732						
- 1	( FYA	νıΒ.	.æ<	uropean	3	79	58	6	5	526	3,260	165	2,375	6,826	6,22	18	62	•••	3,123		
	(n) & (o)	C.	I. ( N	ative .	2	10	7	18	16	239	893	75	225	932	883					•	
8		F	፤. ፈ	uropeun									•••	1.001	1,081	5	109	27	2,449		
		В.	8. (N		5	96	73	269	91		1,081		92,131	1,081 1,33,461	1,81,824	13	373		1,061		
4		E.	.Ι.≺	nropenn ative .	19	2 637	767	90	71	17,345	23,982 3.5°0	2,139	12,434	21,321	20,934	• ,	160 2:9		1,029	180	
		1		uropean	5	255	1,865 210	3,166	1,200	3.194	12 9 13	1	2,678	19,223	19,223	8	76		3,615	163	
5	(a)	1.0		-												12	434		2,373		
5	(b) to (f)	I V		uropoan	2	108	70			1	4 679	124	1,222	7,145	7,115	2	8		46		
6	1	١.	1. E	uropean	9	405	944			4,251	23,173	2,758	4,191	34,776	35 311	14	187		4,754		
8				псоролп	2	78	60				1,668		139	2,207	1.819	3	139		510		
	(6)			ative .	2	72	57	12	G	<b></b>	1,027		173	1,100	1,034	6	121		540	120	
		١	. [E	пърсеп	2	87	67	18	12	2,259	2,651	749	710	6,399	6,663	18	105	1	11,148	3,992	In addition to the
9		1	w.																		grants from the Fi Fund, the Narth Western State raliway as contributed Rs. 2,7 for the "Oakgro School" at Mussoo and Rs. 68 to t Coshedral Orphana
		1	N	lativo .	25	120	98	2,339	493		5,298	160	278	5,736	4,811	1	194	2	2, 08	707	Lahore.
•			). {E	luropean	4	46	38	37	33	525	2,631		1,038	4,244	3,206	17	76		7,915		
10	<b> </b>	l	Ř. ( N	lativo .	3			91	33	ļ	362	·	•••	362	362	3	142		1,189		
11	١		3 · ₹	European	1	8	6			349	1,200	153	86	1,787	1,566						ŀ
		1	•	Nati <b>v</b> o .				"					•••		E 60)	2	35	1		508	
12		, di	N. 5	Зигорен <b>и</b>	2	70	61			1,:70	2,760	1	961	6,416	1	2			321		
		1		Native . Native .	"				"	""	""			"		1	18			1 12	
13	· ·	1	R ( 1	duronean	1	25	16				996		 598	1,394	1	1					
14	·	. IC	J. }	Jativa	١,		72				584		249	833	821						
		1	( 8	European Native .	3	1	45		1 .	2,010	75	675	1,476	4,236	4,117	16	33		423	423	
18	5	٠ [ '	B. { N	Native .	2	1	95	17	16	2,444	415	1,195	2,214	6.268	5,389	13	87		278	278	
17		. 1	D. S. 1	Nativo .	1	63	50	*			300		502	802	1,627						
18	ş		J. B. 1		1	12	8					225		225	225						
•	3 (0	J.	H. { F	European	2	50	35				787		240	977	772		•••				I
•	1			Native .	-											1	88		120		
2	2 (6	?	R. { }	European Native .	7	1	1	1	1	1	1	1	1	13,129	4	1	65		180		
	(71	") ¥	M. (1	Native .	5		1	1		1	586		2,245	5,238	1		•••	""	"		
2	ı	. 8	ι τ. { }	European Native .	1:	1	1	1	l	1	1	1	827 202	6,983	1	1		1			
		- 1	-		1	1	1	1		1:5	470 5,939	i	1,561	8,411	1 .	1	304			850	
2	e	۱	s. { ' m. { 1	European Native .		i	1		85		;		1,393	2,849	1 .	1	1	1		111	*
81	в	١,		Native .	1	1		29	1		82	1		88	1	ı					
					1	-	-	-	<b>-</b>	-	-	-	-		-	-	-	-	-	-	
	1	1	To	tal	207	6,898	5,28	6,891	2,20	48,44	1,14,23	6 17,129	1,40,520	3,20,831	3,12,65	3 17	5 3,780	29	48,08	5 10,98	1

# APPENDIX 38.

History of open lines of railways, and of lines under construction or sanctioned for commencement, on the 31st December 1906.

# INDEX.

Nom	DEB.			Ицин	ER.		
Main bead.	Sub- head.	Railway.	Page.	Main head.		Railway.	Page.
5 2 2 9 11 6	(b) (3) (c) (c) (d)	Agra-Dolhi Chord	143 122 122 160 168 150	30 21 9 6 22 22	(a) (b) (h) (c) (q) (l)	K Kalka-Simla Karaikkal-Peralam Khusisalgarb-Kohat-Thal Kolar Gold-fields Kolhapur Kurnool Bead-Kurnool	203 190 165 151 198 202
24 25 22 12 13 18	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	Baraset Basirhat Light Barai Light Bollary-Rayadrug Bengal and North-Western Bengal Dooars Bengal Dooars Bengal Dooars Bengal Nasper	202 253 195 170 173 174	17 20 9	(b) (b) (d)	L Ledo and Tikuk-Margherita Colliery Lucknow-Barerlly Ludhuana-Dhuri-Jakhal M	181 187 161
8 22 14 5 5 18 5 22 22 26		Bernar Saght Bezwada Extension Bezwada Masulipajam Bhavnagar Good il-Junagar-Porbandar Bhopal-Itarai (British section) Bhop il-Itarai (Nativo Stato section) Bhop il-Ujjain Bhaner Binar-Goona-Baran Birur-Shimoga Bombay, Barodu and Central India Bukhtarpor -Behar Light Burma	113 156 20; 174 143 144 183 145 196 116 204	6 5 1 6 19 3 22 12	(a) (d) (h) (c) (a) (a) (a) (a) (a) (a) (a) (a) (a) (b) (b) (b) (b) (b) (c) (b) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	Madras Madras (North-East line) Mathoran Light Vourblunj Morappor Dharmapuri Mory Myueus igh-Jansipur-Jagannathganj Myscre-Nanjanand Myscre-Nanjanand Mysoro section (Southern Mahratta)  N	148 152 148 115 154 184 133 199 199
15 15 10 3 27	(b) (c)	C Cawnpore-Burhwal (3' 31' gauge) link Cooch Behur Cutch	168 173 204	6 8 9 9		Nagda-Mutira Nagda-Ujian N1 ciri Ntom's Guaranteed Stato North Western (State) Nowshera-Durgai	155 118 153 155 158 165
	( )	D	20.	7	(a)	Oudh and Rohilkhand (State)	106
9 35 4 16 28 14 17 29	(b) (a) (a) (b)	Dandot Light Darpeding-Himalayan Deshi Umballa Kalka Desghur Dholpar-Bari Din myadra Dibrus-Sidiya Dwara-Therria Light	165 208 137 179 205 176 186 205	2 1 2 2	(%) (d) (d) (e) (e) (e) (e) (e) (e) (e) (e) (e) (e	P Palaupur-Deosa Berl denaed Light Pot Lid-Cambay (Anand Tarapur section) Pethal-Cambay (Tarapur Cambay section) Poud elle rry Powayan Light Purulin-Ranchi	124 116 119 120 191 188 116
3	(	Eastern Bengal (State), Eastern, Southern and Contrasections (5' 6' gauge)  Northern, Behm, Dacca and Kunne-Dhubri sections (3' 13' gauge)  Rauagtat-Krishnagar and Teest Kurigram branches and Britis section. Santrabari extensio	129 1 136 1 136	2 9 20	(e) (o) (v) (t) (u)	R Raipur-Dhamtari Raip pla Rapura-Bhatinda Rapura-Bhatinda Rapura-Malwa Rohlkund and Kumson	114 129 162 125 185
4	1 '	East Indian . (2' 6' gauge)	: 13	·	(0)	Salem-Attur	. 155
22	(f) (a)	Gackwar's Dabhoi Gackwar's Mohsana Godhra Rutlam-Nagda Gondiu Chanda Greet Indian Peninsula Guntukhi-Mysore Frontier Gwalior Light  H	. 12 . 12 . 11 . 11 . 13 . 19	22 31 31 6 4 21	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	Saught Sandra (Delhi)-Saharanpur Light Shortur-Co-thin South Behar South Indian Southern Mahratta Southern Punjah Ludhiana' extension	203 206 153 138 168 194 163
1 2 2 3 8	2 (e) 2 (f) 8 (a)	Hardwar-Dohra Hindupur (Yesvantpur-Mysore Frontier) Hespet Kottur Howrah-Aust Light Howrah-Sheakhala light Hydorabad-Godavari Valley	. 16 19 . 19 . 20 . 21	7 7 8 9 21 9 2		T Tanjore District Board Tapti Valley Tarakeshwar Magra Light Tarkeshur Tezpore, Balipara Light	191 121 204 138 207
	5 (V)	Indian-Midland	. 14	84 21	3833	Thaton-Dayinzaik Light Tinnevelly-Quilon (Travanoore) (British section) Tinnevelly-Quilon (Travanoore) (Native State section Tirhoot Tiropattur-Krishnagiri	207 198 ) 193 179 155
3	2 (j) 9 (c) (4 (d) (8 (d) (8) (9) (9) (9) (9)	Jauma and Kashmir (Native State section) Jamnagar Jetalsar-Rajkot Jodhpur Jodhpur-Hyderabad (British section)		14 16 16 17 13 14	(a)	Udaipur-Chitor	209
	9 (i) 9 (i)	Jornat Jubbulpore-Goudia extension Juliundur-Kapurthalla-Sulkanpur (British section)	: 2	1 2 14 27	'	w	. 127

#### APPENDIX 38.

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head 1}}{\text{8ab-heads (a) to (g)}}$ 

#### . BENGAL-NAGPUR RAILWAY SYSTEM-

Chairman-SIR SAMUEL HOARE, BART.

Managing Director-R. MILLER, Esq.

Offices-132, Gresham House, Old Broad Street, London.

Lines comprising the system.—The Bengal-Nagpur railway system is made up of-

•	O	pen line.	Under construction or sanctioned for construction.	Total.
	•	Miles	Wilse.	Miles.
(a) Bengal-Nagpur railway (5'6" gauge)		1,332.58	399.50	1,782.08
Rast Coast (State) rallway, Northern section . (5' 6" gauge)		3)1.03	•••	311.93
(b) Jubbulpor :- Gondia Extension, Beng d'-Na space tillway (2' 6' gauge)		245.05	45.62	290-67
(c) Mourbhanj railway (2' 6" gau ge)		32.41	•••	8 : 41
(d) Parlakimodi Light railway		24.63	•••	21 62
(e) Baipur-Dhamtari branch, Bongal-Nagpur railway . (2' 6" gaugo)		56.91		56.91
(f) Gondia-Chanda (2' 6" gaugo)		•••	212:40	212:40
(g) Puruha-Runch (2'0" gauge)		•••	72.28	72.28
Total .	:	2,053.53	729 80	2,783:33
Running powers—				
Home line over Foreig:, lines :-			•	Miles.
At Katni, East Indian railway for passenger and goods trains At Asansol , , , for passenger trains only		• .		{ 0.30 0.50 1.00
At Howrah , , , , , for pa-senger trains only . At Nagpur, Great Indian Peninsula railway Wallair to Vizagapatam , including wharf an law.unp lines, Southern section, East	Čoa-	st (State) rail	for passenger as way goods trains.	
			Total .	. 7:43
Foreign line over Homa line:— Great Indian Peniasula railway at Katni (for passenger trains only)				. 1.60

#### 1 (a) Bengal-Nagpur railway (5' 6" gauge) —

#### Details of construction-

The open mileage of the Bengal-Nagpur railway, 5' 6" gauge, amounts to 1,694:51 miles, which may be divided into (1) Bengal-Nagpur railway proper, main line (Asansol to Nagpur), 626:83 miles, branches, 755 75 miles; and (2) Norther, section of the old East Coast (State) railway, main line (Baraug to Waltair), 284:75 miles, branch, 27:18 miles. Of this 71:54 miles are double line. Besides these, 355:50 miles were under construction and 44 miles, Sini to Gurumaishini were sanctioned for construction but not commenced.

The construction of the first portion of the main line, Asansol to Nagpur, was sanctioned in 1884 and opened through in 1891. The Sini-Howrah section was opened in 1900.

Permanent-way.—The line is laid with 75-lb. and 85-lb. steel rails on transverse wooden, steel and cast iron po sleepers.

Ballast.—The line is ballasted throughout with stone, except for a few miles on the Chakardharpora district where laterite is used.

Fencing.—The line is fenced only between Nagpur and Kamptee and at the more important stations, also at some of the station yards and first class level crossings on the Baraug-Waltair section.

Curves .- On the main line there are no curves sharper than 1,000 feet radius.

Gradients.—The ruling gradient between Asansol and Nagpur, and Bilaspur and Katni is 1 in 100; between Sini and Khargpur, 1 in 125; between Khargpur and Waltair, 1 in 150; between Khargpur and Howrah, and Khurda Road and Puri 1 in 200; and between Midnapore and Bhojudih, 1 in 200 in the down direction, and 1 in 125 in the up direction.

#### Terms of contracts -

The Bengal-Nagpur railway is worked under the following contracts:--

Contracts of-9th March 1887 .- Bengal-Nagpur Railway Company's principal contract.

31st December 1891.—Contract for the construction and working of a branch line from Jharsuguda (Sambalpar Road) station on the main line to Sambalpur.

27th June 1901.—As to the raising of debenture capital for the construction of the Sini-Midnapore-Howrah and Midnapore-Cuttack extensions.

23rd January 1902.—Contract for the construction and working of the Raipur-Dhamtaii (2'6" gauge) feeder line with a branch to Rajim; an extension (5'6" gauge) from Sini vid Midnapore to Howrah, with branches from Midnapore to Cuttack and the Jharia coal-fields; a line (2'6" gauge) from Gondia to Jubbulpore with branches from Nainpur to Mandla, Nainpur to Chhindwara; and for the working of the Northern section of the East Coast (State) railway as part of the undertaking.

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The general conditions of the contracts are as follows :-

Government aid.—Free grant of land and guarantee of interest in sterling at 4 per cent. per annum on £3,000,000 share capital. On any further capital that may be required the guarantee to be 4 per cent. or such other rate as may be agreed upon.

Terms of contracts.—The contracts provide for the Company raising £3,000,000; any further money required being provided either by the Secretary of State upon such terms as may from time to time be mutually agreed upon, or by the Company within such periods and in such instalments as the Secretary of State may prescribe. Subject to the provisions of the contracts, all moneys raised by the Company become the absolute property of the Secretary of State.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 1 Sub-heads (a) to (g). BENGAL-NAGPUR RAILWAY SYSTEM—contd.

1 (a) Bengal-Nagpur railway (5' 6" gauge) -concld.

Terms of contracts-conold.

Currency of contracts:-

- (1) Principal contract.—Government may determine the contract by giving twelve months' previous notice on the 31st December 1913 or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or the line be worked at a loss. On the termination of the contract the Company is to hand over to Government the railway and all its belongings of every description, and Government are to repay at par the amount of the share capital which has been paid in by the Company.
- (2) Sambulpur branch contract.—The contract for this branch brings it within the provisions of the original contract of 9th March 1887; but provides that the Government may purch so the branch at any time after 1st January 1895 on giving twelve months' notice.
- (3) Contract of 23rd January 1302: Northern section, East Coast (State) railway.—Government may, at any time, by giving six months' previous notice, require the Company to retransfer the whole or any part of the section of railway between Vizianagram and Waltair Junction with all appurtenances, without compensation in respect of such retransfer.

Power of Company to surrender centract .- Fil.

Terms of working.— After deducting working expenses—which may include any single item of capital expenditure classed as a 'Minor Work,' up to Rs. 1,000 but not exceeding Rs. 2,000 at the discretion of the Consulting Engineer subject to a maximum charge on such account of Rs. 20 per mile of the open system in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision—three parts of the surplus profits for any complete calendar year, after providing for payment to Government of interest on advances of capital made by them to the Company and for repayment of the interest paid by them to the Company for that year, to be retained by Government, and the remaining fourth part to be divided between the Company and Government in the proportion which the gress earnings of the Company's undertaking, exclusive of the Northern section of the East Coast (State) railway, hear to the gross earnings of the latter section.

Rates and fures.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates. The Madras Railway Company has the power to quote through rates in the direction of Madras from Bengal-Nagpur railway stations between Cuttack and Waltair. The Bengal-Nagpur Railway Company similarly has power to quote rates from Madras railway stations, Tadepalli and Cuttack, in the direction of Calcutta.

Statistics of working - See page 115.

1 (b) Jubbulpore-Gondia extension, Bengal-Nagpur railway (2' 6" gauge)-

#### Details of construction-

The open mileage of the Jubbulpore-Gondia extension amounts to 245.05 miles, which may be divided into main line (Jubbulpore to Gondia), 140.94 miles, and branches, 104.11 miles. There are still 13.48 miles (Pench Valley railway) and 32.14 miles (Mandla branch), under construction. The construction of the line was sanctioned in 1901 and it was opened in July 1904.

Permanent-way .- The permanent-way consists of 41-lb. flat-footed steel rails on sal sleepers.

Ballast.—The line is ballasted with stone, except between Sooni and Chhindwara where good black basalt has been used.

Fencing.—Only important station yards are fenced.

Curves .- The sharpest curve is of 409 feet radius.

Gradients.-The ruling gradient is 1 in 80.

#### Terms of contracts-

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working-See page 115.

ு 1 (e) Raipur-Dhamtari branch: Bengal-Nagpur railway (2' 6" gauge)—

## Details of construction-

This branch is 56.94 miles in length and consists of the main line (Raipur to Dhamtari), 45.74 miles, and the branch (Abhanpur to Rajim), 11.20 miles. It was sanctioned in 1897 and opened in 1900.

Permanent-way. - The line is laid with 31-lb. flat-footed steel rails on sal sleepers.

Ballast .- Moorum or sand and stone in a few cuttings.

Fencing .- The line is unfenced.

Curves.—The sharpest curve is of 409 feet radius, at Raipur station.

Gradients .- The ruling gradient of the line is 1 in 200.

# Terms of contracts-

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working.—See page 115.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 1 Sub-heads (a) to (y)

#### BENGAL-NAGPUR RAILWAY SYSTEM-contd.

#### Statistics of working-

[BE	ngal-Nagru st Coast (S	STATE) RAI	LLWAY, TH	NO THE	E NORTHE	INDIA E	ON OF THE ETENSION		_	Т	ABUE II.	•			
year.	Capital outlay to end of cach year,	Gross carnings.	Not carnings.	Per- cent- age on onpi-	Interest.	Com- pany's share of	Gain or los to the State.	Nagpur-Cl 3' 3	nattisgarh,	Katni-U 5′ 6		Bengal-	n) Nagriur, 6".	Jubbu Goudia sion an pur-Di	exten-
Calendar	caen year.	ŭ		tal out- lay.		earn- ings.*		Earnings per mile per wook.	Pro : of exp : to carnings,	Earnings per mile per week.	exp. to	Earn- ings per uite por week.	Pro: of exp: to earnings	Eurn- ings por mile per week.	
- 1	Ra.	Rs.	Rs.		Rs. 83.911	Rs.	Rs. 83,911	Rs.		Ra.		Rs.		Re.	
1879	28,62,990 55,49,511	1.03.952	28,215	0 51	1,58, 404		-1.30.589		79 54	l :::		•••			•••
1881	73,65,710	2 81,529	65,056	0 90	2,62,932		-1.96,876		76.23		:::				***
1892	90,64,388	6,01,386	1,69,171	2 09	3, 9,9.7	•••	-1,50,790	114	68.20			3.		1 3	
เธละ	96,43,590	13,20,021	6,83,860	7 09	3,73,283	•••	+ 3,10,577	170	45.19						
884	1,06,34,112	13,23,014	6.58,030	6.19	4,24,10	•••	+ 2.33.620	171	57:82	,	1	1	ŀ		1
835	1,50,66,406	14.14 889	4,93,575	3 25	5,86,281	•••	- 92.706		65 12						***
886	1,51,70,455	14,24,521	5,33,511	29+	7,29,5 1		- 1.96,041		62:51	37	104 35				···
887	2,42,30,937	11 47,705	3,03,207	1.52	13,35,56 (	•••	-10,33,366	177	59.09	41	116.11	1	i		
888	5.23,92,191	16,09,125	5,62,971	1.02	22,17,333	•••	-16,54,362					164	67.58		
889	7,08,75,156	19,96,930	4,03,160	0.57	29,93 361		-25,93,201	1	1	1		101	80 03	İ	j
1690	8,11,66,762	28.61.578	5,17,163	0.67	53 8-,8 2		-28,41,389				٠.	131	80.89		
891	9,09,01,161	51,57,356	26.81,153	2.96	35,05,676	•••	- 8,21,23			1		129	50 81		"
892	9,56,14,736	60,83,562	30,08,166	3.1.	39 05 34		- 8,97,179			1		111	:0.55	1	
1893	9,80,08,121	64,17,751	32,62,220	3.33	43,97,191		-11,35,574	1				144	19.17		
804	9,81,73,789	66 90,645	32,58,414	3 32	45,80 993		13,25,579	.i	1	1	1	149	51.30		}
1895	9,84,94,777	68.74.710	35 41.441	3:58	48,56,800		-18,15,356			1 :::		153	48 49		
	11,05,30,319	63 ( 8.52 )	19,27,869	2.65	.8,21,501		-18,99 535			1		142	54.03		***
	13,01,58,784	62,00,309	19,79 559		51,45,240		-21,55,6h1					1 138	51.94	1 :::	
898	14,67,03,520	68,79,193	33,63,451	2 29	54,23,1-6		-20,59,532					143	51.10		
1899	15 55 00 055	<b>9</b> 0,73,460	47,21,814	i 2·83	19,75,853		12.54,009	,l	l	i		100	47.00	1	i
1900	16,65,90,365 17,41,74,601	#0,75,460 1 90 75 99	77,13 050	4 (3			+ 12,22,41					152 207	47.98		
	21,19,23,276					1.78.810	-20,18,32		1 ::		:::	161	52.58	25	72:13
	22,51,91,979			3 10	85 44 3 1	41.601				1	1	176	51.09	21	17.27
903	24,97,58,910			2.87	89,66,181	4,067	-19,21,94;					178	54.63	21	61.98
	00 14 05 450	1 00 10 10	0.000		0542.004	000		.1	1	i	İ	010	40.00	1	
							+ 45,317 + 33,71,73	. 3		1		210 270	48.97	31	67:32
	†27,33,72,570   <del>1</del> 28,40,48,532				1,03,41,779				:::	1 ".		270	44.53	42 56	71.68 65.56
	1 20,30,30,00	~	1 .,,,	1 *"	2,00,71,770	3,10,000	1	1 "	} ""	1 .		1 2.70	1000	1 30	, 00 00

# 1 (c) Mourbhanj railway (2' 6" gauge)--

# Dotails of construction-

This railway is 32:41 miles long. Its construction was sauctioned in 1902 and it was opened in 1905.

Permanent-way. - The line is laid with 30-lb. flat-footed steel rails on sal sleepers.

Ballast .- The line is ballasted with screened laterite, gravel and broken laterite.

Fencing .- The line is unfenced.

Curves .-- The sharpest curve is of 955 feet radius.

Gradients,-The ruling gradient is 1 in 100.

# Terms of contract—

The line is worked under an agreement between the Maharaja of Mourbhanj and the Bengal-Nagpur Railway Company, approved in Railway Board's letter No. 223 R.T. of the 10th March 1905.

The general conditions of the agreement are as follows :-

Government aid.—Nil. The line is the property of the Maharaja of Mourbhanj.

Currency of agreement.—The agreement is terminable on 31st December of any year on three months' previous notice. Terms of working .- Actual cost.

Rates and fares .- To be fixed by the Company.

# Statistics of working-

-											TA	Blæ	ı.					Tabi	E II.
		 	-	•	Cal	lenda	r yes	r.			,			 Capital ont- lay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	por mile	Proportion of expenses to earnings.
<del></del>	 	 											4	Rs.	Ra.	Rs.		Rs.	
1905 .		٠.								٠	•	•		6,21,895	81,494	7,422	1.19	20	76:48
1906 .	• (			•	•	•	•	•	•	•		٠	•	6,94,892	44,825	21,888	3.15	27	81-17

Based on actual receipts and payments during the year.

Includes the Gondle-Chanda and Purulis-Banchi reilways.

#### History of railways constructed and in progress. [For Index see page 112.]

 $\textbf{Number} \ \ \tfrac{\text{Main head 1}}{\text{Sub-heads (a) to } (\rho)}. \quad \textbf{BENGAL-NAGPUR RAILWAY SYSTEM} - \textit{concld}.$ 

#### 1 (d) Parlakimedi Light railway (2' 6" gauge)-

On the 20th May 1901 the Indian Railways Act, 1890 (IN of 1890), except section 135, was applied to the line. The working of this railway was taken over by the Bengal-Nagpur railway from the 1st January 1902. Details of construction-

This railway is 24 62 miles long. Its construction was sanctioned in 1898 and it was opened in 1900. It runs from Naupada to Parlakimedi.

Permanent-way.—The line is laid with 30-lb. flat-footed steel rails on transverse wooden sleepers.

Ballast .- The line is ballasted throughout with laterite, gravel and stone.

Fencing .- Short lengths of fencing have been provided in a few places where the railway in cutting runs alongside

Curves.-There are no curves of less than 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

#### Terms of contracts-

The Parlakimedi Light railway is worked under an agreement, dated the 24th January 1905, between the Raja of Parlakimedi and the Bengal-Nagpur Railway Company.

The general conditions of the agreement are as follows:—

Government aid.—Nil. The line is the property of the Raja of Parlakimedi.

Currency of agreement.—The agreement is forminable on 31st December of any year on three months' previous

Terms of working .- Actual cost.

Rates and fares .- To be fixed by the Company.

#### Statistics of working-

												TAI	ste I							TABL	e IT.
			/-			Ca	londa	r <b>y</b> ea	r.				-		-	Capital out- lay to end of each year.	Gross carnings.	Net earnings	Per cent. on capital outlay.		Proportion of expenses to earnings.
1908 1904 1905 1906	:	:	:	:	:	:	:	<i>:</i>	:	:	:	:	:	:		Rs. 7,10,974 7,10,974 7,10,975 7,12,466	Rs. 16,683 20,675 27,181 21,493	Rs. 9,365 1.301 +4,481 9,703	 0.63	R <sub>S</sub> . 13 16 21 17	155 70 10d-29 83-51 145-14

#### 1 (f) Gondia-Chanda railway (2' 6" gauge)-

#### Details of construction-

This railway, which runs from Gondia to Chanda (148.65 miles), with a branch from Pauni to Nagpur (63.75 miles), total length 212 10 miles, was sanctioned in 1904 and work was started in November 1905.

## 1 (g) Purulia-Ranchi railway (2' 6" gauge)—

# Details of construction -

Rungi

This railway, which runs from Purulia to Runchi (72:28 miles), was sanctioned in 1905, and construction was commenced in November of that year

#### Main head 2 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM-Number Sub-hoads (a) to (a)

Chairman-Colonel Sir W. S. S. Bisset, K.C.I.E., R.E.

Secretary-Colonel, W. V. Constable, R.E.

Offices .- Gloucester House, Bishopsgate Street without, London, E.C.

Lines comprising the system—The Bombay, Baroda and Central India railway system is made up of—

										Under	
									Open line.	construction	Total.
										or sanctioned for	
										construction.	
									Miles.	Miles.	Miles.
(a) Bombay, Baroda and Central India rai	lway			•	.{	(3'	3\/"	gange) 4	$\{55.12\\ 39.23$ $\}$ $504.35$		504.95
(b) Godhra-Rutlam-Nagda railway .	•				•	(5'	6"	gange)	141.11	***	141-14
(c) Nagda-Ujjain railway						(5'		gauge)	34.33	•••	31.32
(d) Petlad-Cambay railway (Anand-Tarapu	r seci	ion)				(5'	$6^{\prime\prime}$	gauge)	21.50	•••	21.50
(e) Petlad-Cambay railway (Tarapur-Camb	ay se	ohion	1)	•		(5'	6"	gauge)	12:30	•••	12.30
(f) Tapti Valley railway		•				(5'	e"	gange)	155.48	***	155.48
(4) Ahmedaluid-Dholka railway						(3'	37"	gauge)	33.20	•••	33:50
(h) Abmodabad-Parantij railway						(3'		gange)	54.70	***	54.70
(i) Gackwar's Mohsana railway						(8'		gauge)	92.63	45.84	138.47
(j) Jaipur (Siwai-Madhopur) railway .		•				(3'	34"	gauge)	32:18	40.65	72.83
(k) Palaupur-Deesa railway						(3'	33"	gauge)	17.28	•••	17:28
(I) Rajputana Malwa railway		•			•	(3'	38"	gauge)	1,774.36	•••	1,774 36
(m) Vijapur Kalol-Kadi railway		•		•	•	(3'	34"	Kanke)	41 37	• •••	41.37
(n) Gaekwar's Dabhoi railway	•	•			•	(2'	6"	gaugo)	94.49		94.48
(o) Rajpipla railway	•	•	•	•	•	(2'	6"	gauge)	97:37	***	87 37
					1	Total	•		3,046.96	86.49	3,133.45
·											

ing powers—  Home line over foreign time—  Dadar Junction to Carnac bridge, Great Indian Peninsula railway (for goods trains on	ly) .			Miles. 4.89
Foreign lines over home line:— East Indian railway, Agra East Bank to Agra Fort (for goods trains only) Great Indian Peninsula railway at Ujjain (for passenger and goods trains)			: :	1.00 0.34
" " Dadar Junction to Colaba (for goods trains only) at Agra (for passenger and goods trains)			: :	7:25 2:89
		Tate	.1	11.00

# History of railways constructed and in progress.

[For Index see page 112.]

# Number Main head 2 Sub-heads (a) to (b). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

# 2 (a) Bombay, Baroda and Central India railway proper (5' 6" gauge)-

#### Details of construction-

The open mileage amounts to 504.35 miles, which may be divided into 389.35 miles of main line and 115 miles of branches. 251.90 miles are double line.

First sanction to the construction of the main line [Bombay (Colaba) to Wadhwan] was accorded in 1856 and the line was opened throughout in 1872.

Permanent-way.—The main line is laid with 69-lb. double-headed and S2-lb. bull-headed steel rails on crossoted pine and oval pot sleepers.

The branches are laid mostly with 69-lb. double-headed and 414-lb., 48-lb., 50-lb. and 75-lb. flat-footed steel rails on oval pot and wooden sleepers.

Ballast.—The line is mostly ballasted with broken stone, gravel and shingle.

Fencing .- The line is fenced throughout except the Patri branch.

Curves.—The sharpest curve on the main line and on the Godhra branch is of 1,500 feet radius, on the Patri branch of 2,865 feet radius, and on the Godhra-Baroda Chord of 1,910 feet radius.

Gradient\*.—The ruling gradient on the greater part of the main line is 1 in 500, but there are short lengths of 1 in 200 and of 1 in 100 at the approaches to major bridges. On the Godhra branch the ruling grade is 1 in 200, except for a short length at the Mahi low level bridge where it is 1 in 80; on the Patri branch and the Godhra-Baroda Chord it is 1 in 300, except for short lengths of 1 in 200 on the latter.

#### Terms of contracts-

Consequent upon the determination, by purchase of the Company's undertaking, of the then existing contracts the railway is temporarily with effect from the 1st January 1906, being worked under the terms of a provisional contract dated the 27th December 1905, pending the execution of a new contract for a term of years, between the Secretary of State and the Bombay, Baroda and Central India Railway Company.

#### Statistics of working-

									T	ABLE I.				
		Cı	alond	ar y	ear.			Capital outlay to end of cach year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Guaranteed juterest (converted at current rates of exchange up to 1905).	Company's share of net earnings (arrived at under terms of contract).	Gain or loss to the State.
1879 1880	:	:	:	:	:	:	:	Rs. 8,54,16,162 8,47,31,626	Rs. 71,52,788 82,44,876	R <sub>9</sub> . 32,13,354 47,34,654	8·76 5·58	Rs. 43,69,254 43,69,254	Rs. 5,83,846	Rs. -11,55,900 -8,03,293
1881 1882 1883 1884 1885	:	:	:	:	:	:	:	8,66,45,448 8,75,89,091 8,89,91,377 9,02,69,608 9,22,58,636	97,45,138 1,01,76,190 1,19,22,209 1,21,95,590 1,31,10,336	56,78,755 50,15,619 67,16,067 68,87,562 74,01,987	6:55 5:78 7:54 7:68 8:02	43,69,251 48,07,731 43,38,189 49,99,341 53,35,189	8,30,798 8,06,846 11,44,829 13,17,768 14,57,541	+4,78,703 -98,461 +12,33,049 +5,70,453 +7,89,257
1886 1887 1888 1889 1890	:	:	:	:	:	:		9,16,82,002 9,32,12,200 9,45,87,848 9,49,45,797 9,53,10,045	1,35,05,635 1,21,64,856 1,27,38,938 1,32,34,371 1,29,40,370	78,73,228 69,98,127 70,48,164 75,41,081 74,23,195	8·50 7·50 7·45 7·94 7·79	55,87,410 57,17,318 60,29,893 61,10,257 54,66,227	16,97,985 12,56,055 12,68,879 14,86,399 14,22,120	+5,87,803 +24,754 -2,50,608 -55,566 +5,34,848
1891 1892 1893 1894 1895	:	:	:	:	:	:	:	9,55,86,799 9,55,28,735 9,62,57,602 9,77,45,855 9,97,90,965	1,41,37,769 1,42,44,478 1,50,96,045 1,59,48,484 1,75,53,067	82,25,120 81,30,959 95,78,044 1,00,70,974 1,09,87,063	8:60 8:51 9:95 10:30 10:96	58,61,996 65,57,945 66,41,227 76,09,071 77,03,258	18,06,348 17,86,755 25,09,537 27,85,713 81,37,619	+5,56,776 -2,18,741 +4,24,280 -2,73,810 +96,186
1896 1897 1898 1899 1900	•	:	:	:	:	:		10,31,57,107 10,63,10,220 10,85,60,144 11,40,78,658 11,60,94,044	1,62,03,933 1,42,61,293 1,58,62,726 1,74,65,045 1,75,98,486	89,00,862 64,70,202 87,42,205 92,90,365 82,28,632	8:60 6:09 8:05 8:15 7:08	73,03,618 69,36,853 67,87,071 67,46,668 68,35,449	20,78,128 9,51,545 19,49,477 21,68,929 15,68,577	-4,80,979 -14,18,196 +5,657 +3,74,775 -1,75,394
1901 1902 1908 1904 1905	:	:	:	:	:			11,95,61,022 12,18,78,965 12,37,88,639 12,44,90,478 12,52,43,897	1,59,88,796 1,57,43,536 1,69,63,028 1,78,23,663 1,98,62,065	87,53,789 79,87,622 84,35,201 93,87,312 1,08,90,134	7·82 6·51 6·87 7·54 8·70	70,04,569 71,28,187 72,59,871 78,86,912 <b>73,82,</b> 579	18,11,800 12,93,644 15,12,518 18,91,186 26,03,040	62,670 4,84,809 2,77,198 +1,09,264 +9,04,506
1906	٠	***	•	•	•	•	$\cdot$	19,55,08,078	1,99,81,754	1,05,89,688	8.40	72,58,353	7,80,248	+ 25,01,087

# History of railways constructed and in progress. [For Index see page 112.]

Number—Main head 2 Sub-heads (a) to (o). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (a) Bombay, Baroda and Central India railway proper (5' 6" gauge)—concld.

Statistics of working—concld.

#### TABLE II.

Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to carnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.			Rs.	1		r Ks.			Rs.	
1860	49	70·17	1872	290	59·97	1884	509	42.95	1896	676	45-07
1861	73	54·97	1873	260	59·23	1885	548	43.11	1897	595	54-68
1862	94	50·14	1874	565	52·12	1886	564	41.12	1898	662	44-89
1863	138	49·51	1875	285	54·41	1887	508	41·89	1899	729	46-81
1864	156	85·33	1876	296	54·74	1888	532	44·11	1900	734	52-50
1865	223	63·83	1877	345	41·97	1889	552	42·41	1901	665	44-06
1866	278	71·93	1878	298	46.61	1890	540	42·06	1902	659	49·00
1867	291	66·56	1879	309	46.97	1891	590	41·23	1903	758	49·46
1868	287	73·66	1880 •	<b>€</b> 355	42.57	1892	594	42·92	1901	718	47·12
1869 1870 1871	307 327 300	74·32 60·54 59·98	1881 1882 1883	423 427 497	41.04 50.76 43.10	1893	630 665 732	36·55 36·85 37·69	1905 1906	780 809	43·78 47·27

# 2 (b) Godhra-Rutlam-Nagda railway (5' 6" gauge)-

#### Details of construction-

This railway is 141:14 miles long. Its construction was sanctioned in 1890 and it was opened throughout in 1896.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on transverse steel, deedar and creested pine sleepers.

Ballast.—The line is ballasted throughout with broken stone and gravel.

Fencing.—There are 761 miles of fencing. The rest of the line is unfenced except in station yards.

Curves. - The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 200, with short lengths of 1 in 100, and from 1 in 101 to 1 in 150, between Godhra and Jekot.

#### Terms of contracts-

This is a State line and is worked as a part of the Rajputana-Malwa railway under the contracts and conditions relating to that railway.

#### Statistics of working-

Included with the Rajputana-Malwa railway.

# 2 (c) Nagda-Ujjain railway (5' 6" gauge)-

#### Details of construction -

This railway is 34.32 miles long. Its construction was sanctioned in 1894, and it was opened throughout in 1896.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on cast iron oval pot sleepers.

Ballast.-The line is ballasted with broken stone.

Fencing .- Only station yards are fenced.

Curves .- The sharpest curve is of 1,910 feet radius.

Gradients. The ruling gradient is 1 in 200.

#### Terms of contracts-

The line is owned by the Gwalior State and worked under the following:-

Agreement of—15th July 1896 (between His Highness the Maharaja Scindia of Gwalior and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway
Company) as to percentage of working charges.

The general conditions are as follows :-

Government aid .- Nil. The line is the property of the Gwalior State.

Currency of agreement.— } The agreement may be terminated at any time on one year's notice from either Power to determine agreement.— } party expiring on the 30th June or 31st December in any year.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Werk,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 Sub-heads (a) to (o). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (c) Nagda-Ujjain railway (5' 6" gauge)-concld.

Terms of contracts-concld.

Bombay, Baroda and Central India railway) excluding 2' and 2' 6" gauge lines, in proportion to the total earnings of the Nagda-Ujjain railway.

Rates and fares .- Conform generally with those in force on the Godhra-Rutlam-Nagda railway.

Statistics of working-

											TA	BL	к I.				TABL	E II.
				Ca	alend	ar y	0 <b>a</b> r.			•			Capital outlay to end of each year.	Gross carnings.	Net earnings.	Per cent. on capital outlays	Earnings per mile per week.	Proportion of expenses to earnings.
													Rs.	Rs.	Rs.		Rs.	
1895			•	•		•			•				5,33,660					
1896 1897 1898 1899 1900	:	;	:	:		:	:	:	:	:	:	:	20,71,251 22,19,919 22,31,596 22,34,346 22,29,753	40.701 1,04,639 1,29,627 1,47,175 2,51,783	17,762 47,756 71,509 77,732 1,20,956	0.86 2:15 3:20 3:48 5:42	49 58 73 83 141	56·36 54·36 44·83 47·18 51·96
1901 1902 1903 1904 1905	:	:	:	:	:	:		:	:	:	:	•	22,31,982 22,30,063 22,41,230 22,41,231 22,40,441	1,12,366 1,57,211 1,20,951 1,23,654 1,71,435	67,208 85,851 62,949 66,441 99,907	3·01 8·83 2·81 2·96 4·46	63 88 68 69 96	40°19 45°39 47°95 46°27 41°72
1906	•		•	•		•	•	•	•	•			22,40,441	1,71,491	91,060	4.06	96	46*90

#### 2 (d) Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge)-

# Details of construction-

This section of the Petlad-Cambay railway is 21.50 miles long. Its construction was sanctioned in 1888, and it was opened throughout in 1901.

Permanent-way.—The permanent-way consists of 664-lb. flat-footed steel rails on steel sleepers from Anand to Petlad and on crossoted pine sleepers from Petlad to Tarapur.

Ballast.—The line is ballasted with gravel.

Fencing.—Thirteen miles, between Anand and Petlad, are fenced. The rest of the line is unfenced, except in station yards.

Curves .- The sharpest curve is of 1,433 feet radius.

Gradients .- The ruling gradient is 1 in 200.

# Terms of contracts—

The line is owned by the Baroda State and worked under the following :-

Agreement of -5th May 1890 (between the Government of His Highness the Gaekwar of Baroda and the Bombay,
Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway
Company) as to percentage of working charges.

The general conditions are as follows :-

Government aid .- Nil. The line is the property of the Baroda State.

Currency of agreement.— Bither party may terminate the agreement at any time on giving one year's Power to determine agreement.—

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any engle item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on each account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2' and 2' 6" gauge lines, in proportion to the total earnings of the Petlad-Cambay, Gaekwar's Mehsana and Vijapur-Kalol-Kadi railways.

Rates and fares.—To be fixed from time to time by the Company with the approval of His Highness' Government and, as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 Rab-heads (a) to (a). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (d) Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge)—concld. Statistics of working—

									T	ABI.	æ I.					ТЛВІ	E II.	<u> </u>
											Capital outley to	Gross	Not	Per cont on	GAEKWAR 5	S PETLAD,	PETLAD (ANAND-	
			(	AI.E:	NDAR	YEA	R.				end of each year.	earnings.	carnings.	capital outluy.	Earnings per mile per week.	Proportion of expenses to earnings.	Farnings per milo per week.	Proportion of expenses to carnings.
****											Rs. 11,030	Rs.	Rs.	•	Rs.		Rs.	
1889 1889 1890	:	:	:	:	:	:	:	:	:		4,71,822 6,47,922	 32,619	20,870	 3·22	 71	36.08	 	
1891 1892 1893 1894 1695	:	:	:	:	:	:	:	:	:		7,10,118 7,11,0<1 7,12,768 7,23,482 7,23,139	59,113 61,213 67,953 69,668 73,891	36,346 34,757 40,027 41,037 46,581	5-12 4-89 5-70 6-09 6-44	85 88 92 100 106	38·51 43·25 36·47 36·79 36·96	  	
1896 1897 1898 1899 1900	:	:	:	:	:	:	:	:	:	•	7,23,616 7,55,7 7,49,037 7,52,439 7,52,097	1,17,540 64,737 51,121 70,668 88,481	82,847 33,946 28,156 39,312 41,718	11:45 4:49 8 76 5:22 5:55	169 93 71 102 127	29·52 47·56 44·92 41·37 52·86	  	 
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:	:		11,56,381 11,85,970 11,48,092 11,46,552 11,31,273	93,233 1,05,951 98,451 1,20,974 1,10,463	51,709 56,818 50,289 64,876 81,966	4:36 4 79 4:38 5:66 7:25	  	   	101 95 88 108 126	44-47 46:37 48:92 46:37 41:65
1906											11,30.87a	1,39,209	73,034	6.21	•••		124	47:11

# 2 (e) Petlad-Cambay railway (Tarapur-Cambay section) (5' 6" gauge)-

#### Details of construction-

This section of the Petlad-Cambay railway is 12:30 miles long. It was sanctioned in 1899 and was opened to Cambay in 1901.

Permanent-way.—The permanent-way consists of 661-lb. flat-footed steel rails on crossoted pine sleepers.

Ballast.-The line is ballasted with gravel.

Fencing.—Only station yards are fenced.

Curves .- The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 600, with a short bit of 1 in 200 between Sayama and Cambay.

#### Terms of contract-

The line is owned by the Cambay State and worked under-

Agreement of -17th May 1902 (between the Cambay State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows:-

Government aid .- Nil. The line is the property of the Cambay State.

Currency of agreement.—

The agreement may be terminated at any time on one year's notice from either Power to determine agreement.—

The agreement may be terminated at any time on one year's notice from either party, expiring on the 30th June or 31st December in any year.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a Minor Work, subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2 and 2 or gauge lines, in proportion to the total earnings of the Tarapur-Cambay railway.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Cambay State, and as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

-				<del></del>						Т	ABL	E I.			*		ТАВІ	æ II.
-				c	alond	lar y	oar.						Capital outlay to end of each year.	Gross carnings.	Net carnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses
													Rs.	Rs.	Rs.		Rs.	
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:	:	:	:	:	7,49,676 7,49,676 7,49,676 7,68,728 8,06,482 8,11,255	12,011 25,497 25,151 82,199 83,638 84,531	5,950 18,622 12,803 17,276 19,603	0·79 1·81 1·71 2·25 2·43	40 45 44 87 59	50:46 46:57 49:10 46:35 41:78 47-11

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 2 Sub-heads (a) to (c)

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM -contd.

#### 2 (f) Tapti Valley railway (5' 6" gauge)-

#### Details of construction-

This railway connects Kankra Khari, a station on the main line of the Bombay, Baroda and Central India railway, with Amalner. It is 155'48 miles long. It was opened in 1900.

Permanent-way.—The permanent-way consists of 70-lb. flat-footed steel rails on wooden sleepers.

Ballast .- The line is ballasted throughout with stone.

Fencing.—Only station yards and important level crossings are fenced.

Curves. - The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 200.

#### Terms of contracts-

The line is owned by the Tapti Valley Railway Company and worked under the following contracts:-

Contracts of -28th August 1896 (between the Secretary of State and the Tapti Valley Railway Company) for construction.

30th October 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway
Company) for maintenance and workin

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:-

Government oid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa radways from traffic interchanged with the Tapti Valley railway, so as to make up an amount equal to interest for the year at the rate of 4 per cent. per amount on the actual capital expenditure, plus a sum of Rs. 6.000 per annum towards the Company's office expenses and expenses of management. Land in British territory was provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1921, or at the end of any subsequent period of 10 years, paying the Company in rupers a sum equal to 25 times the average yearly net carnings of the Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent, the total capital expenditure of the Company or be less than such capital expenditure; or Government may determine it on the 31st December 1950, paying the Company in rupers an amount equal to the total capital expenditure.

Power of Company to surrender contract .- Nil.

Terms of working.—Government undertake to construct (from funds supplied by the Company), work and maintain the line through State or other agency, the necessary rolling-stock being supplied by the working agency. The general working expenses of the system, excluding the 2' and 2' 6" gauge lines, are divided in proportion to the gross earnings of the component parts, the Tapti Valley railway being debited with the share thus arrived at (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), subject to a maximum charge of 44 per cent. of its gross earnings for the year. The residue of the gross earnings is payable to the Tapti Valley Railway Company.

Rates and force.—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway.

# Statistics of working-

				TABLE I.				TAI	ste II.	
Calen- dar year.	Capital outlay to end of each year.	Grons carnings.	Net earnings.	Percentage on capital outlay.	Rebate from B.,B. & C. I. Ry.	Total income.	Per cent. of total income or. capital outlay.	Earnings por falle por week.	Proportion of expenses to earnings.	į
	Rs.	Rs.	Rs.		Rs.	Ro.	į i	Rs.		
1896 1897 1898 1890 1 <b>9</b> 00	8,300 20,96,294 60,45,418 1,21,09,133 1,28,31,291	 2,636 2,42,593 6,68,475	  	***			  	 18 71 84	48 70 47 40 44 00	The not earnings for 1898, 1899 and lat-half of 1900 were credited to interest on capital and those for 2nd-half of 1900 (including re-hato) were treated as a set off against the charge to capital for interest in the accounts for 1st-half of
1901 1902 1903 1904 1905	1,29,18,780 1,29,70,581 1,30,02,400 1,30,77,018 1,80,83,629	6,00,553 8,26,485 8,62,759 6,58,740 10,11,222	3,42,243 4,64,242 4,83,142 3,68,894 5,86,921	2·65 3·57 8·72 2·89 4·49	33,226 45,196 40,258 28,441 2,928	3,75,469 5,08,488 5,23,400 3,97,885 5,89,849	2 90 8 92 4 03 3 04 4 51	74 102 107 81 125	43 01 43 95 44 00 41 00 41 95	Excluding interest, Rs. 4,488, on the capital cost of works at Amaler junction, the percentage of innome on capital outlay in 1908 was 4.00.
1908	1,80,82,853	11,84,712	6,35,460	4.86		6,35,460	4:86	140	44-00	,

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main hoad 2}}{\text{Sub-heads (a) to }(o)}$ . BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

#### 2 (g) Ahmedabad-Dholka railway (3' 33" gauge)—

#### Details of construction-

This railway connects Sabarmati, a station on the Rajputana-Malwa railway, with Dholka. It is 33:50 miles long. Its construction was sauctioned in 1901 and it was opened in 1903.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails on decdar sleepers.

Ballast .- Ballast is provided only at points and crossings, and for 100 feet on each side of bridges and lovel crossings.

Fencing .- Only station yards are forced.

Curres.—The sharpest curve is of 1,146 feet radius.

Gradients .- The ruling gradient is 1 in 150.

#### Terms of contracts-

The railway is worked under the following contracts :-

Contracts of -25th March 1902 (between the Secretary of State and the Ahmedabad-Dholka Railway Company) for construction.

18th July 1902 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the contracts are as follows:-

Government aid.—A relate is allowed up to 10 per cent. of the gross carnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Dholka railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure plus Bs. 5,000 per annum towards the Campany's office expenses and expenses of management. Land provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 30th June 1922 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly not earnings of the Company during the last preceding three years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure.

Power of Company to surrender contracts .- Nil.

Terms of working.—The callway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1.000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2' and 2' 6' gauge lines, preportionate to its total carnings, but not exceeding 14 per cent. of its gross earnings for the year. The not earnings thus arrived at are payable to the Ahmedabad-Dholka Railway Company.

Rates and fares. -To be a ranged from time to time between Government and the working agency within the maxima and minima rates and fares in force on the undertaking

#### Statistics of working-

								7	'авт,е І.					TAI	tr îí.
,	,	Calon	abir j	year.		<b>-</b> -	Capital outly to end of each year.	Стога екгичида,	Net earnings.	Per cent. on capital ontlay.	Robata from Bona- bay, Baroda and Central India railway,	meomo.	income on	per week.	Pro: of exp: to-carnings.
1903 1904 1905 1906	:	•	:	:	:	:	Rs. 10,13,420 10,17,308 10,44,935 10,83,722	R4. 64,261 99 044 98 214 1,09,743	Rs. 35,986 55,165 57,203 56,418	3:55 5:15 5:17 5:21	Rs.  	Rs 35,986 53,165 57,203 56,418	3:55 5:45 5:47 5:21	Rs. 45 57 56 58	44.00 44.00 41.76 44.00

# 2 (1) Ahmedabad-Parantij railway (3' 33" gauge)-

#### Details of construction-

This railway connects Ahmedadad, a station on the Bombay, Baroda and Central India railway, with Idar Road. It is 54.70 miles long. Its construction was sanctioned in 1896 and it was opened in 1897.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails on creosoted pine and deodar sleepers.

Ballast.-The line is ballasted with kunkur, sand and stone.

Fencing .- Only station yards are fenced.

Curves .- The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 150.

# History of railways constructed and in progress. [For Index see page 112.]

Main head 2 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM-contd. Number Sub-heads (a) to (o)

2 (h) Ahmedabad-Parantij railway (3' 3\sum\_8" gauge)—cozcld.

#### Terms of contracts-

The Ahmedabad-Parantij railway is worked under the following contracts:-

Contracts of -13th March 1896 (between the Secretary of State and the Ahmedabad-Parantij Railway Company) for construction.

> 4th June 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

> 1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:-

Government aid .- A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Parantij railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, plus Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land provided free.

Currency of contracts. -Government may, by giving 12 months' notice, determine the contracts on the 31st December 1917 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly not earnings of the Company during the last preceding five years, but not exceeding by more than 20 per cent the total capital expenditure of the Company, nor being less than such pital expenditure, or on the 31st December 1946 paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contracts .- Nil.

Terms of working .- The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Mmor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2' and 2' 6" gauge lines, proportionate to its total earnings but not exceeding 41 per cent. of its gross carnings for the year. The net carnings thus arrived at are payable to the Ahmedabad-Parantij Railway Company.

Rates and fares. -To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares in force on the Rajputana-Malwa railway. Statistics of working-

									TAR	ж 1.					TAB	uk II.
•		Cal	enda	r yoa	r.			Capital outlay to end of each year	евоти евраните	Not carolings.	Porcentage on capital outlay.	Robate from B., B. & C. I. Ry.	Total income.	Per cent. of total income on capital out- lay.	Eavnings per mile per week.	Pro: of exp: to earn- ings.
1000								Rs. 13,12,752	R≓.	Bs.		Ra.	Rs.		Rs.	
1896 1897	:	:	:	:	:	:	:	19,42,211	69,0 <b>69</b>	 36,665	1 89		36,665	1.89	46	46.93
1898						•	•	19,42,971	1,19,790	8.,816	4.13		85,836	4.13	33*	42.70
1899	•	•	•	•	٠	٠	•	19,49,616 19,55,305	2,10,034 2,65,105	1,21,687 1,55,952	6·24 7 93	•••	1,21,687 1,55,952		74 93	42-23
<b>1</b> 90 <b>0</b>	•	•	•	•	•	•	•	14,50,000	2,000,100	1,00,000	103		2,00,002	1	23	41.17
1901									1,77,438	99,365	5.10		99,365		62	14:00
1902									1,79,794	1,00,685	5.11		1,00,685	5-11	63	40.04
1903				•	•	•	•		1,:0,112	81063	4:45 5:24		84,063 1,04,287		53	44.00
1904	•	•	•	•	•	•	•	10 01 75 2	1,86,227 1,98,713	1,04,287 1,15,469	5.80		1,15,469		65 70	44 00
1905	•	•	•	٠	•	•	•	10,01,100	1,00,710	1,10,203	300	1	1,10,30,	0 00	l "	41.89
1006		٠.						19,98,023	2,20,9.34	1,23 727	6.19		1.23,727	6.19	78	44.00

#### 2 (i) Gaekwar's Mehsana railway (3' 3 " gauge)-

#### Details of construction-

The total length of this railway is 92.63 miles. It consists of three branches, Mehsana to Kheralu, 27.73 miles, Mehsana to Virangam, 40.21 miles, and Mehsana to Patan, 24 69 miles. The first branch was opened throughout in 1885 and the other two in 1891.

Besides the above 45.84 miles are under construction.

Permanent-way.—The Kheralu and Virangam branches are laid with 411-1b. flat-footed steel rails on transverse steel and deodar sleepers. The Mehana-Paran section is laid with 40-lb, iron rails on deodar sleepers, except in station yards and for the first 3 miles which are laid with 411-lb. steel rails.

Ballast.—The line between Mehsana and Kheralu is ballasted with sand and the rest with kunkur.

Fencing .- The whole line, except 414 miles which are fenced by wire, was originally fonced with cactus; but this has in several places been entirely destroyed by floods and locusts and what remains is much broken up.

Curves .- The sharpest curve is of 1,910 feet radius.

Gradients .- The ruling gradient is 1 in 150.

The railway is the property of the Baroda State and is worked under the following:-

Agreement of-1st July 1891 (between the Government of His Highness the Gaekwar of Baroda and the Bombay.

Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 Bombay, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (i) Gaekwar's Mehsana railway (3' 3 gauge)—concld. •

Statistics of working-

												EAT	LK I	•		•		TAI	BLE II.
				•	Calo	ndnr	yeu	ır.				0		Capital outlay to end of each year.	Gross earnings.	Not earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp to earnings.
1887 1888 1889 1890	:	:	:	:	:			:	:	:	:		•	Rs. 13,55,492 9,16,565 11,18,446 25,44,310	Rs. 27,890 47,502 55,290 59,214	Rs. 5,564 16,672 20,348 23,308	0·41 1·82 1·82 0·92	Rs. 33 43 37 41	80·05 64·90 61·82 60·66
1891 1892 1893 1894 1895	:	:	:	:	:		:	:	:	:	:	:	:	29,04,050 29,71,610 30,26,752 30,94,578 32,55,044	1,94,247 2,58,963 3,36,859 3,79,972 3,38,444	1,05,801 1,53,005 1,98,250 2,36,387 2,02,410	3·64 5·15 6·55 7·64 6·22	49 54 70 79 70	45·53 40·92 41·12 37·79 40·18
1896 1897 1898 1899 1900	:	. :	:	:	•	•	:	:	:	:	:		<b>'</b> ::::::::::::::::::::::::::::::::::::	32,61,448 32,63,900 32,82,612 32,83,612 33,01,950	4,23,283 3,39,125 3,46,491 3,76,160 4,28,545	2,71,262 1,18,358 1,99,052 2,16,654 2,36,754	8·32 3·63 6·67 6·60 7·17	88 70 72 79 89	35:91 46:58 42:55 42:40 44:75
1901 1902 1903 1 <b>904</b> 905	:	<i>:</i>	:	:	:		•	:	:	: :	:	:	:	33,48,911 93,61,329 88,78 102 33,95,678 34,36,885	3,92,227 3,74,515 3,47,083 3,82,249 4,52,184	2,15,111 1,98,977 1,77,466 2,04,906 2,62,901	6:42 5:62 5:25 6 06 7:65	81 78 72 79 94	45·16 46·87 48·87 46·39 41·86
906									•					42,73,358	4,20,777	2,21,124	5-24	87	46.74

# 2 (j) Jaipur (Siwai Madhopur) railway (3' 33" gauge)-

#### Details of construction -

From Jaipur the Rajputana-Malwa railway is utilized as far as Sanganer, from which station this railway actually starts. The open mileage (Sanganer to Nawai) is 32:18 miles. It was sanctioned in 1897 and was opened in 1905.

There are 40.65 miles still under construction.

Permanent-way.—The permanent-way consists of 411-lb. flat to to 1 steel rails laid on deodar sleepers.

Ballast.-The line is ballasted with stone.

Fencing.—The line is unfenced except at stations and at points where the line crosses the main road.

Curves.—The sharpest curve is of 2,865 feet radius.

Gradients.—The limiting gradient is 1 in 250 in the down direction and 1 in 200 in the up direction.

#### Terms of contract-

The railway is owned by the Jaipur State and worked by the Bombay, Barola and Central India Railway Company under terms which are at present under consideration.

#### Statistics of working-

											TABLE I.				Таві	n II.
				Caler	dar 1	oar.					Capital outlay to end of each year.	Gross carnings.	Net earnings.	Per cent, on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1905 1906	:	:	:	:	:	:	:	:*	:	:	Rs. 18.24,728 21,14,507	R s. 12 299 68,943	R*. 6,779 36,617	0·37 4:78	Rs. 52 41	44·88 46 89

## 2 (k) Palanpur-Deesa railway (3' 3%" gauge) --

#### Details of construction-

This railway is 17:28 miles long. Its construction was sanctioned in 1892 and it was opened in 1893.

Permanent-way.—The permanent-way consists of 40-lb, flat-footed iron rails, except in station yards and the first 8 miles of line which are laid with 41½-lb, steel rails. The rails are laid on Denham-Olpherts' plate, east iron pot, and steel dish cover sleepers.

Ballast.—The line is ballasted with stone and sand.

Fencing .- The line is fouced throughout.

Curves, -The sharpest curve is of 1,910 feet radius.

Gradients.-The ruling gradient is 1 in 150,

# History of railways constructed and in progress. [For Index see page 112.]

Number Sab-heads (a) to (0) BOMBAY, BARODA AND CENTRAL INDIA BAILWAY SYSTEM -contd.

# 2 (k) Palanpur-Deesa railway (3' 3 gauge) -concld. Terms of contracts-

The railway, is worked under-

Terms contained in letter No. 44 Ry., dated the 30th March 1892, from the Government of India to the Scoretary of State, and letter No. 62 Ry., dated the 23rd June 1892, from the Secretary of State to the Government of India.

Contract of-1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows:-

Government aid .- The line is owned jointly by Government and the Palanpur Durbar.

Currency of contract. The contract is coterminous with the Company's contract for working the Rajputana-Malwa railway. In the event of the line being extended, Government can terminate the contract on giving the Company six months' notice.

Power of Company to surrender contract .- Nil

Terms of working .- The railway is debited with a share of the working expenses of the system, excluding the 2' and 2' 6" gauge lines, in proportion to the total earnings of the Palanpur-Deesa railway, the net earnings thus arrived at in any half-year being divided between Government and the Palanpur Durbar in proportion to the capital provided by each after excluding from the Government capital the sum of Rs. 25,117, the expanditure incurred in providing a 5'6" gauge sub-structure.

Rates and fares .- Same as on the Rajputana-Malwa railway.

Statistics of working-

											TABLE I.						
	(	Calen	lar v	ear.			CAPI	TAL.		NETEA	RNINGS,		r. on capi-	Interest	<del></del>	TAB	LE II.
	, 						Contributed by the Palanpur Durbar.		Gross carnings.	Attribut- able to the Durbar.		capital contribus-	On capital contribut- ed by Gov- ernment.	Govern- ment capital.	Gain or loss to the Govern- ment.	Earnings per mile per week.	exp: to
1892							Re. 20,000	Rs. 16,746	Rs.	Rs.	Rs.	<u></u>		Rs. 1,081	Rs -1,031	Rs.	
1898 1894 1895 1 <b>89</b> 6	:				:	1,85,000 1,85,000 1,85,000 1,85,000	1,78,953 2,14,601 2,15,374 2,32,746	4,436 37,544 38,182 51,629	1,335 11,365 11,333 14,101	1,110 11,791 11,512 15,072	0·72 6·14 6·13 7·62	0.63 5.49 5.35 6.47	5,371 8,783 8,878 9,149	-4,261 +2,998 +8,134 +5,923	38 42 42 57	44.87 88.85 40.17 48.50	
1897 1898 1899 1900	:	:	:	:	:	:	1,85,000 1,85,000 1,85,000 1,85,000	2,33,264 2,33,264 2,33,264 2,33,261	43,264 38,199 44,628 47,669	10,883 10,934 12,102 14,238	17,243 11,628 13,618 12,616	5:88 5:59 6:54 7:70	5:25 4:99 5:84 5:41	9,305 9,331 9,330 9,330	+ 2,938 + 2,297 + 4,288 + 3,286	48 43 50 58	46-85 49-50 42-87 43-66
1901 1902 1908 1904 1905	:				:	1,85,000 1,85,000 1,85,000 1,85,000 1,85,000	2,33,264 2,36,786 2,37,069 2,37,069 2,37,069	36,805 33,690 29,734 29,185 35,178	9,375 8,329 7,423 7,280 9,469	10,548 8,380 7,898 8,340 10,948	5:07 4:50 4:01 3:94 5:12	4·52 3·52 3·33 3·62 4·58	9,330 9,408 9,432 9,474 9,472	+1,218 -1,078 -1,534 -1,134 +1,376	41 37 33 32 39	45-67 47-01 48-47 46 49 42-24	
1906							1,85,000	2,39,155	40,154	9,962	11.376	5 33	4.76	9,531	+1,845	45	47:11

#### 2 (1) Rajputana-Malwa railway (3' 8\square)—

The Maharaja Holkar lent the British Government one hundre! lakhs of supees at 41 per cent. per annum for the construction of the Khandwa-Indore section, and is entitled to a moiety of surplus profits.

The Maharaja Scindia of Gwalior lent the British Government seventy-five lakhs of rupces at 1 per cent. per annum for the construction of the Indore-Neemuch section and the branch to Ujjain.

The Cawnpore-Achnera line was leased to the Bombay, Baroda and Central India Railway Company on the 1st October 1886, and is now treated as an integral part of the Rajputana-Malwa railway.

The Rajputana-Malwa railway system has been worked by the Bombay, Baroda and Central India Railway Company since the 1st January 1885.

#### Details of construction-

The open mileage of the Rajputana-Malwa railway is 1,774:36 miles. It is made up of the following sections:—
(1) Rajputana section, main line (Delhi to Ahmedabad), 539:15 miles; Rewari-Bandikui-Phulera loop, 173:89 miles; and branches, 139:28 miles; (2) Malwa section, main line (Khandwa to Ajmer), 393:19 miles; branch, 14:28 miles; (3) Caunpore-Achnera section, main line (Caunpore to Achnera), 239:47 miles; branches, 12:33 miles; (4) Rewari-Fasilka section, 262:77 miles.

The Rajputana section was sanctioned in 1870 and was opened in 1881; the Malwa section was sanctioned in 1872. opened in 1881; the Cawnpore-Achnera section was sanctioned in 1874, opened in 1884; and the Rewari-Fazilka section was sanctioned in 1861, opened in 1885. 2.92 miles of the line are double track.

Permanent-way.—The Rajputana section is laid with 50-lb. flat-footed steel rails on deodar sleepers. The Malwa section has mixed 40-lb. iron, 411-lb. and 50-lb. steel flat-footed rails on deodar sleepers. The Cawnpore-Achnera section has 412-lb. and 50-lb. steel rails on deodar sleepers. The Rewari-Fazilka section has 412-lb. steel rails on deodar sleepers.

## History of railways constructed and in progress.

[For Index see page 112 ]

Number Main head 2 Sub-heads (a) to (b). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (1) Rajputana-Malwa railway (3' 33" gauge) -contd. Details of construction-concld.

Ballast.—The line is ballasted throughout with stone, kunkur, sand and hard quartz.

Fencing.—The total length of line fenced on the Rajputana section is 669 miles. The Malwa section is fonced for 931 miles and at stations. The Camppore-Achieva section is foreced on both sides for 1451 miles on the main line, except for 71 miles which are fenced on one side only. The Soron branch is fenced for 31 miles and the Brindaban branch for 31 miles. The Rewari-Bhatinda-Fazilka section is ferred for about 1134 miles and at stations. On the Rewari-Phulera section only the Narnaul station yard is fenced.

Curves.—The sharpest curve is of 600 feet radius.

Gradients.—The ruling gradient is 1 in 150, except on the Malwa section between Khandwa and Kalakhund where it is 1 in 100 and between Kalakhund and Patal Pani where it is 1 in 40. Terms of contracts-

The Bajputana-Malwa and Godhra-Butlam-Night railways are worked together as one undertaking under the following contracts :-

Contracts of -24th September 1884.-The original contract (between the Secretary of State and the Bombay, Baroda and Central India Gailway Company) for maintaining and working the Rajputana-Malwa railway.

> 16th March 1888.-Contract supplemental to that of 1884 for maintaining and working the Cawnpere-Ashnera tailway as a part of the Rajputana-Malwa railway.
>
> Sth November 1889.—Contract supplemental to those of 1884 and 1883 for maintaining and working

> the Brindaban branch as a part of the Cawnpore Achnera railway.

5th October 1893.—Sapplemental to the riginal contract for maintaining and working the Godhra-Rutlam railway as a part of the Rajputana-Malwa railway.

1st October 1897. - Supplemental to those of 1884 and 1893 for maintaining and working the Rutlam-Nagda radway as a pack of the Godhra-Rotlam railway.

1st February 1901.—Supplemental to those foliable and 1888 modifying the terms as to the division of working expanses.

The general conditions of the contracts are as follows:-

Government aid .- The line is the property of Government.

Currency of contracts.—The contracts were current up to the 31st December 1905, and shall continue in force as from that date until determined in pursuance of the provisions of the provisional contract, dated the 27th December 1905, between the Secretary of State and the Bombay, Baroda and Central India Railway Company.

Power of company to surrender contracts .- Nil.

Terms of working.—The working expenses of the system (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a miximum charge on such account of Rs. 20 per mile of line open in each half-year, and a payment of R-, 10 for every mile of line open to traffic to be made half-yearly to Government for supervision), excluding 2' and 2' 6" gauge lines, are pooled, and divided between the component parts of the system in proportion to the gross carnings of each. The net earnings thus arrived at of the Rajputana-Malwa, 3' 3\frac{3}{3}" gauge, and Godhra-Rutlan-Nagda, 5' 6" gauge, railways, are paid in full to Government.

Rates and fares, -- Maximum and minimum rates and fares have been fixed within which the Company is authorised to vary the rates.

Statistics of working-

TABLE I (including the Godlers-Ruthau-Nagda ralway).

			Cale	ndar	year.					Capital outlay to end of each year.	Gross earnings.	Net ournings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.
.879 .880 .881		:	:	:	:	:	:		•	Rs. 7,06,47,354 8,38,87,014 9,30,43,645	Rs. 38,61,997 59,12,511 91,70,110	Rs. 15,41,903 17,33,714 35,96,044	2·18 2·07 3·86	Rs. 28,43,439 35,81,449 37,48,505	Rs.  	Re. -13,01,536 -18,47,785 -1,52,461
882 883	:	:	:	:	:	:	•	:		9,91,83,933 11,08,57,933	1,14,82,614 1,35,64,166	52,84,668 63,39,208	5:31 5:72	38,74,919 40,74,808		+ 14,09,749 + 22,64,400
884 685 866 887 888	:	:	:	:	:	:	:	: .	:	11,92,08,595 12,22,63,117 12,80,59,407 12,87,69,487 12,96,59,656	1,46,20,446 1,73,00,501 1,82,93,610 1,65,28,203 1,85,14,714	61,93,677 79,71,964 89,55,549 81,24,547 96,31,727	5·19 6·52 6·99 6·31 7·48	43,90,548 49,10,379 51,72,731 51,86,578 52,27,345	6,28,054 5,06,190 4,99,909	+ 18,02,129 + 30,61,585 + 81,54,764 + 24,31,779 + 89,04,474
1890 1891 1893 1893	:	:	:	:	:	:	:	:	:	13,02,53,556 15,00,01,510 13,17,20,440 14,34,24,072 14,30,06,325	1,99,70,005 1,74,28,281 2,17,59,570 2,24,60,454 2,26,83,265	1,07,97,217 86,42,525 1,23,17,065 1,32,14,774 1,83,25,640	8·29 6·65 9·35 9·21 9·32	*52,48,893 52,61,288 53,13,844 56,14,176 57,00,808	8,56,110 6,57,951 8,78,835 13,45,763 13,24,918	+ 46,92,214 + 27,23,236 + 61,24,380 + 62,54,835 + 62,99,914
891 895 896 897 898	:	:	:	:	:		:	:		15,55,56,871 15,03,08,348 14,94,51,054	2,51,44,200 2,45,42,974 2,10,21,002 1,81,74,358 2,23,17,315	1,54,75,342 1,44,02,355 1,13,79,807 1,00,97,008 1,19,05,991	10·51 9·26 7·57 6·76 7·91	58,77,844 59,78,606 60,63,242 60,48,581 60,77,309	15,63,148 16,21,635 9,93,351 5,09,720 9,58,967	+ 80,34,350 + 68,02,117 + 43,23,214 + 85,88,707 + 48,74,718
1899 1900 1901 190 1968	:	:	:	:	:	:	:	:			2,60,94,541 2,91,75,054 2,78,62,296 2,58,96,694 2,27,25,664	1,47,30,148 1,60,55,050 1,48,89,645 1,86,25,409 1,13,42,360	9·78 10·48 9·65 8·71 7·18	60,92,658 61,35,151 61,89,498 62,80,815 62,84,957	9,02,364 21,67,610 13,785  5,644	+ 76,45,126 + 77,52,289 + 66,86,862 + 73,45,094 + 50,51,769
1904 1905 1906	:	•	:	:	:	;	:	:	:	16,17,31,683 16,28,49,528 16,65,57,367	2,83,65,289 2,84,44,243 2,80,04,905	1,21,57,833 1,62,29,896 1,47,43,580	7:52 9:97 8:85	64,55,047 64,41,437 65,99,940	544 414 497	+ 57,02,786 + 97,88,456 + 81,43,596

History of railways constructed and in progress. [For Index see page 112.]

Number  $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (b)}}$  · BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2(1) Rajputana-Malwa railway (3' 3%" gauge) -coneld.

Statistics of working-conold.

TABLE IL

	i M	outana- alwa; '3;".		r and dia- moh, Ug".	Rain	itern itana, 33".	Rewari- po 3'	Foroze- re, 3.".	Muttra-l 3'	Inthrae,	Cawn Faruk 3'	pore- imbad, 3¦".	Muttra-	Achnera, 84".	Ach	pore- nora, 3½".	Rt	odhra- otlam- agda, o' 6".
Calen- dar year.	Earn- ings per mile per week.	Pro: of exp: to entrings.	Earu- ings per milo por week.	Pro: of exp. to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to enra- ings.	Earn- ings per mile per week.	Pro: of exp : to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to earnings	Earn- ings per unde por week.				Earn- ings per mile per week.	Pro: of exp: to carn- ings.	Earn- ings per mile per week.	Pro : of exp : to earn- ings.
1873 . 1874 . 1875 . 1876 . 1877 .	Rs. 32 69 98 114 130	96-59 80-37 64-04 65-40 67-119	Rs. 60 123 99 86	81-02 91-71 92-87 76-86	R4.		Ra		Rs.  108 55 68	 58·18 57·71 51:86	Rs		Rs		Rs		Rs.	
1878 . 1879 . 1880 . 1881 . 1882 .	136 153 152 189 188	61:97 66:74 66:88 60:41 53:07	122 128 118 132	67:50 74:53 74:71 69:11	 86 151 	86 08 85:79 	 	  	65 83 89 90 81	58 38 54 97 57 35 69 19 76 97	 18 65 8	233-15 69 76 67:36	     	89:01 86:12			•	
1883 . 1884 . 1885 . 1886 . 1887 .	219 223 224 212 191	52·18 56·92 52·81 50·27 50·84	  			 	75 96  	81·28 67·28 		  	uded wit   	h Cawnt	ore-Ach	nera.	50 81 70 	63:98 69:17 87:47		
1888 . 1889 . 1890 . 1891 . 1892 .	215 230 200 251 257	48·26 45·82 50·41 43·47 41·01			 	 	 . <del></del> 			  		· · ·		 				
1893 . 1894 . 1895 . 1896 .	259 285 269 227 212	\$1.12 38.19 16.29 44.35 46.60	 	  		 	  	  				i : !					50 106 184 189 146	41·61 40·64 57·01 69·27 72·02
1898 . 1899 . 1900 . 1901 . 1902 .	211 285 317 313 291	42:83 42:06 43:18 46:29 47:54			  		  	  		 	:- :- :-						181 172 219 156 140	51·14 56·84 46·84 45·15 46·27
1903 . 1904 . 1905 .	253 260 206	49·16 47·63 12·95		 	 	 	 	 	 		 	 	 			:::	147 158 224	48·29 47·62 42·78
1906 .	287	47:37															217	47 04

2(m) Vijapur-Kalol-Kadi railway (3' 3 gauge)-

Details of construction—
This railway is 41.37 miles long. Its construction was sanctioned in 1899 and it was opened in 1903.

Permanent-way.—16 miles are laid with 414-lb. flat-footed steel rails and 25 miles with 40-lb. flat-footed iron rails on deodar sleepers.

Ballast.—The line is ballasted with broken stone and shingle.

Fencing.—Only station yards and 11:07 miles of the Vijapur-Kalol section are fenced.

Curves.—The sharpest curve is of 3,820 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts-

The railway is the property of the Baroda State and is worked under the following:-

Agreement of —23rd November 1903 (between the Government of His Highness the Gackwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of-1st February 1901 (between the Secretary of State and the Bombay, Baroda and Contral India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Pethal-Cambay railway (Anand-Tarapur section).

Statistics of working-

												Tage	е 1.		TABI	E II.
				Caler	ıdar	year.	•				Capital outlay to end of each year.	Gross carnings.	Net carnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro : of exp to carnings.
90	•								:	:	Ra. 7,534 29,885	Rs	R-9.	•••	Кв. 	•••
01 102 108 104 105	:								:	:	6,60,716 10,47,188 11,84,246 13,35,402 13,19,586	19,514 56,916 74,572 87,181	 9,226 28,782 40,083 50,496	 1·18 2·43 3·00 3·83	 23 81 35 <b>4</b> 0	52·72 40·43 46·25 42·05
)6								•			18,24,925	95,660	50,648	8.83	44	47.05

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 Sub-heads (a) to (a). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—confd.

2(n) Gaekwar's Dabhoi railway (2' 6" gauge)-

#### Details of construction-

The total length of the railway is 94.48 miles. It consists of three sections, Miyagam to Chandod, 30.62 miles; Dabhoi to Bodeli, 22.41 miles; and Dabhoi to Masor\* Road, 41.45 miles. The construction of those sections was first sanctioned in 1672, 1877 and 1879, respectively, and they were opened throughout in 1879, 1890 and 1904, respectively.

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on wooden sleepers, but there are still about 5 miles of 28-lb. iron rails in the road.

Ballast.—The line is chiefly ballasted with sand.

Fencing .- The line is practically unfenced except in station yards.

Curves.—The sharpest curve is of 500 feet radius.

Gradients.—The ruling gradient is 1 in 400, with small lengths of 1 in 200 and 1 in 300.

#### Terms of contracts-

The line is owned by the Baroda State and worked under-

Agreement of—1st January 1897 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows:-

Government aid .- Nil. The line is the property of the Baroda State.

Currency of agreement.—The agreement may be terminated at any time on one year's notice from either side to expire on the 30th June or 31st December.

Terms of working.—The Company work the railway at actual cost, plus 12½ per cent. of total working expenses (but not less than Rs 500 per mensem or more than Rs. 800 per mensem, in a half-year) for superintendence.

Rates and fares.—The rates and fares are fixed from time to time by the Company with the approval of His Highness' Government, and as far as possible must conform generally with those in force on the Bombay, Baroda and Central India railway.

#### Statistics of working-

		TABLE	т.		,	TABLE II.		
Calendar year.	Capital outlay to ond of each year	Gross	· Net earnings.	Per cent. on capital outlay.	Calendar year.	Earnings per milo per week.	Pro : of exp : to earnings.	Rемания.
1879	Rs. 9,62,450 11,65,540 12,57,448 12,78,942 12,73,639	Re. 72,083 1,28,825 1,41,233 1,14,022 1,46,970	Rs. 31,608 65,134 48,849 46,747 38,585	3 28 5:59 3:88 3:66 3:05	1873 1874 1875 1876 1877	Rs. 21 32 83 88 45	98·34 75·78 78·11 75·35 78·20	`
1864 1885 1886 1887	12,80,177 13,11,229 13,58,502 13,16,259 13,74,295	1,49,091 1,52,283 1,53,699 1,56,752 1,45,757	48,540 55,623 89,394 47,339 43,854	3:80 4:24 2:90 3:52 3:19	1878 1879 1880 1881 1882 1883 1884	43 46 51 46 47 48 49	62·42 56·15 49·44 65·41 67·54 73·75 67·43	:
1889 1890 1891 1892 1893	16,10,398 17,53,577 17,94,157 18,47,403 18,55,158	1,42,989 1,95,028 2,01,165 8,38,609 2,52,106	49,398 74,570 68,126 1,06,510 1,32,507	3-07 4-25 3-80 5-77 7-14	1885 1886 1867 1888 1889 1890 1891 1892	50 50 51 48 47 57 54 64	63:47 74:37 69:73 69:91 65:45 61:76 66:13 55:86	
1894	18,88,774 19,08,757 20,74,756 21,08,574 21,18,191	2,10,316 2,31,473 2,58,788 2,20,901 2,10,240	95,429 96,764 1,25,657 50,949 - 26,592	5:05 5:02 6:06 2:42	1893 1894 1895 1896 1897	68 65 63 69 56	47·41 60·29 58·73 51·44 76·94	
1899 1900 1901 1902	21,17,586 21,17,528 21,14,302 22,34,929 23,60,528	2,45,974 2,35,281 2,53,936 2,22,573 2,60,550	87,571 61,603 73,427 76,867 7,467	4·14 2·44 3·47 3·62 0·32	1898 1899 1900 1901 1902	51 60 57 62 54	112·65 64·40 73·82 71·08 65·69	·
1904 1905 1906	24,64,882 24,72,909 84,75,587	2,98,908 3,72,467 3,94,817	1,26,426 2,04,004 1,78,665	5·18 8·25 7·22	1908 1904 1905 1906	60 65 76 80	97·18 57·70 45·28 54·75	The decrease in net earnings in 1903 was due principally to the cost of 3 engines hav- ing been charged to Revenue.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 Bub-heads 10 to (0). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—concld.

# 2 (0) Rajpipla railway (2' 6" gauge)-

#### Details of construction-

This line, which connects Anklesvar with Nandod, is 37.37 miles long. Its construction was sanctioned in 1894 and it was opened in 1809.

Permanent-way .- The line is laid with 41 b. flat-footed steel rails on half-round jungle teak sleepers.

Ballast .- The line is chiefly ballasted with coarse river sand.

Fencing .- Only the station yards and small lengths at miles 1 and 9 are fenced.

Curves.—The sharpest curve is of 1,132 feet radius.

Gradients.—The ruling gradient is 1 in 150.

#### Terms of contracts--

The line is owned by the Rajpipla State and is worked under-

Agreement of-19th March 1900 between the Rajpipla State and the Bombay, Baroda and Central India Railway Company.

The general conditions of the agreement are as follows:-

. Government aid .- Nil. The line is the property of the Rajpipla State.

Currency of agreement.—The agreement may be terminated by either party on the expiration of three years or at the end of any calcular half-year thereafter, on one year's notice from either side.

Terms of working.—The Rajpipla State is debited with the actual cost of working; and in addition one per cent. on the net carnings of the Rajpipla nailway as contribution to the Provident Fund and 12½ per cent. on total working expenses (but not less than Rs. 300 per mensem or more than Rs. 800 per mensem) for superintendence.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Rajpipla State; and to conform with those generally in force on the Bombay, Baroda and Central India railway.

#### Statistics of working-

												TAULE 1.			TAR	E II.
			Cales	idai	yeur.	•				Capital outlay to end of each year.		earninge.	Not earnings.	Por cent. on capital outlay.	Earmage per mile per week.	Pro: of uxp:
1894 1895	:		:	•		:	:	•	:	Re. 12,674 77,265		Rs. 	R4.		Пв. 	•••
1896 1897 1898 1899 1900	:	:	:	:	•:	:	:	:		4,69,141 7,55,792 11,63,333 18,07,820 13,76,159		5,705 10,624 35,809 49,463	- 6,574 -9,172 8,478 12,139	  0.65 0.93	11 11 22 25	214-53 186-2 <b>3</b> 76-32 75-46
1901 1902 1903 1904 1905	:	٠٠٠	:	:	•	:	:	:		19,06,822 13,05,115 13,04,281 13,04,522 13,04,522	,	47,182 35,726 44.8 0 49,207 62,017	10,487 10;131 10,674 16,890 28,194	0 80 0 78 0 82 1 29 2 16	24 20 28 25 32	77·77 73·84 76·19 65·68 54·54
1906		•				•		•		13,04,867		67,137	32,526	2:49	35	51 55

 $\mathbf{Number} \text{-} \underset{\mathbf{Suli-heads} \ (a)}{\mathbf{Main}} \text{ head 3 } \\ \mathbf{EASTERN} \ \ \mathbf{BENGAL} \ \ (\mathbf{STATE}) \ \ \mathbf{RAILWAY} \ \ \mathbf{SYSTEM--}$ 

Lines comprising the system.—The Eastern Bengal (State) railway system is made up of—

ন	Open line.	or sanctioned for construction.	Total.
	Miles.	Miles,	Miles.
(a) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5'6" gauge)	497.95	8:39	500:34
Eastern Bengal (State) railway, Northern, Fehar, Dacea and Kaume-Dhubri soctions and Gauhati extension (3° 3½" gauge) Ron ghat Krish ager and Toesta-Kurgram		228:27	946.58
branches and British section of the Santral are Extension 2' 6' gauge)  (c) Mymensingh-Jamalpur-Jagan nathgan; railway (3' 3," gauge)  (d) Cooch Behar railway (2' 6' gauge)	55.03 53.22 33.60	•••	55·03 53 2 <b>2</b> 33·60
Total .	1,358-11	236.66	1,594.77

#### Running powers-

3 (a) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5' 6" gauge)—

The open mileage of the standard gauge portion of this system amounts to 497.95 miles, which may be divided into (1) Eastern section, main line, 145.07 miles, branches, 154.37 miles; (2) Southern section, main line, 29.20 miles, branches, 41.62 miles; (3) Contral section, main line, 144.51 miles, branches, 23.18 miles. Of those 112.21 miles are double line. Besides the above there were under construction 3.39 miles of single, and 5.00 miles of double line; and 2.99 miles of double line are being quadrupled.

History of railways constructed and in progress. [For Index see [age 112.]

Number Main head 3 EASTERN BENGAL (STATE) RAILWAY SYSTEM—contd.

3 (a) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5' 6" gauge) -concld. Details of construction-concld.

Sanction was first given to the construction of the above mentioned sections of the Eastern Bengal (State) railway in 1859, 1862 and 1881, respectively, and they were opened throughout in 1871, 1863 and 1884.

Permanent-way. - The permanent-way on the double line portion of the Eastern section consists of 73-lb. and 75-lb. double-headed steel rails, with Denhain-Olpherts' east iron sleepers, except on the length between Calcutta and Naihati which is laid with 85-lb bull-headed steel rails, with sal and jurrab sleepers at the joints. The single line portion of the Eastern section is also laid chiefly with 73-lb, and 75-lb, double headed steel rails, the greater part on Denham and Olpherts' east iron sleepers and the remainder on east iron bowl and sal wood sleepers. The Murshidabad branch is laid with 75-lb. new pattern flat-footed steel rails on sal sleepers.

The double line portion of the Southern section and the Budge Badge branch are laid with 73-lb. double-headed steel rails on Donham and Olpherts' cast iron sleepers. The single line portion of the Southern section consists of 72-lb. and 73-lb. double-headed iron and steel rails mostly on Denham and Olpherts' cast iron sleepers. The Diamond Harbour branch is laid with 64-lb. and 73-lb. double-headed steel rails mostly on Denham and Olpherts' cast iron sleepers.

The Central section is laid with flat-footed steel rails 62 lbs. to the yard on sal sleepers.

Ballast.—The main line is ballasted generally with brick ballast. Where 85-lb. bull-headed rails have been laid, brick

ballast has been replaced by stone.

Fencing.—The whole of the Eastern section is fenced, except between Panchooria Junction and Goalundo, and the Faridpur branch. The Southern section is fenced as far as Sonarpur; heyond Sonarpur to Canning there is no fencing. The Diamond Harbour and Budge-Budge branches are fenced. The Central section is fenced throughout.

Curves.—The sharpest curve is of 1,000 feet radius. Gradients.—The ruling gradient is 1 in 30.

Terms of contracts \_\_Nil. The line is owned and worked by the State.

Statistics of working.—See pages 131 and 132.

3 (b) Eastern Bengal (State) railway, Northern, Behar, Dasea and Kaunia-Dhubri sections and Gauhati extension (3' 5%" gauge)-

Details of construction-

The metre gauge section comprises an open mileage of 718 31 miles and may be divided into (1) Northern section. main line, 196.85 miles, branches, 161.49 miles; (2) Behar section, main line, 81.86 miles, branches, 102.42 miles; (3) Dacca section, 85.92 miles; (1) Kannia-Dhubri section, 51.02 miles and (5) Gauhati extension, 35.75 miles. In addition to the above 228.27 miles are under construction.

Sanction was first given to the construction of (1), (2), (3) and (4) of the above-mentioned sections in 1874, 1881, 1882 and 1899, respectively, and they were opened through in 1878, 1889, 1885 and 1902. (5) was sanctioned in 1902

and opened up to mile 45.37 only in 1906.

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 50 lbs. and 114 lbs. per yard, on sal sleepers. On the Northern section, Sara to Siliguri, and the Brahmaputra-Sultanpur and Kaunia-Benarpara branches and on the Gauhati extension the tails are 50-lb. On the Behar and Kaunia-Dhubri sections, Manihari Ghat to Dhubri, the greater part of the rails are 50-lb., and the remainder are \$11-lb. On the Kosi branch and the Dacca section the rails are all 111-lb. On the Barsoi-Kissengunge branch the rails are mostly flat-footed iron, 40 lbs. per yard, the remainder being 414-lb steel. The sleepers are mostly sal, but there are also metal sleepers of various types.

Ballast.—The whole of the line, except the portion from Golokganj Junction to Dhubri, the Kaunia-Bonarpara branch and the Gauhati extension, is bullasted or shortly to be bullasted. The ballast is brick, stone and shingle.

Fencing.—The whole of the S'3\frac{3}{2}" gauge lines are fenced, except the Brahmaputra-Sultanpur, Barsu-Kussengunge and Kaunia-Bonarpara branches, the Gauhati extension and the portions from Golokganj Junction to Dhubri and Dacoa to

Curves.—The sharpest curve is of 1,416 feet radius.

Gradients.-The ruling gradient is 1 in 200.

Terms of contracts .- Nil. The line is owned and worked by the State.

Statistics of working.—See pages 131 and 132.

3 (t) Eastern Bengal (State) railway, Ranaghat-Krishnagar and Teesta-Kurigram branches, and the British section of the Santrabari extension (2' 6" gauge)—

The Ranaghat-Krishnagar branch has been amalgamated with the Eastern Bengal (State) railway system from 1st July 1904. The Teesta-Kurigram branch was originally a pertion of the 2'6" gauge lines from Teesta Junction to Mogalhat and Jatrapur, known as the Kaunia-Dhailla branch. The line from Teesta Junction to Mogalhat has been converted to the 3'8\secangle\*" gauge to form an integral part of the "Kaunia-Dhubri section." The line from Kurigram to Jatrapur has been abandoned.

Details of construction-

1,20

The Ranaghat-Krishnagar branch is 20:25 miles long. Its construction was sanctioned in 1895 and it was opened in

The Teesta-Kurigram branch is 14 99 miles long; it was opened in 1881.

The British section of the Santrabari extension of the Cooch Behar State railway is 1979 miles long. Its construction was sanctioned in 1897 and it was opened in 1901.

Permanent-way.—On the Ranaghat-Krishnagar and Teesta-Kurigram branches the rails are flat-footed steel, 25-lbs. per yard; the sleepers are pyinkade and sal. On the Santrabari extension the rails are flat-footed iron, 40-lbs. per yard, and flat-footed steel, 41\(\frac{1}{2}\)-lbs. per yard, laid on sal sleepers.

\*\*Ball\*\*\*st.\*\*—The Ranaghat\*\*-Krishnagar branch is brick ballasted; the Teesta-Kurigram branch is not ballasted; and the

Santrabari extension is now being ballasted with stone.

\*\*Pencing.\*\*—No lines on the 2' 6" gauge are fenced.

\*\*Curres.\*\*—The sharpest curve is of 500 feet radius.

Gradients -No grade on the Ranaghat-Krishnagar and Toesta-Kurigram branches exceeds 1 in 200. On the Santrabari extension the ruling gradient is 1 in 100, and there is a short grade of 1 in 50 near the terminus (Jainti).

Terms of contracts.-Nil. The line is owned and worked by the State.

Statistics of working. See pages 131 and 132.

# History of railways constructed and in progress. [For Index see page 112.]

# Number Main head 3 Sub-heads (a) to (d). EASTERN BENGAL (STATE) RAILWAY SYSTEM—contd. 3 (a) and (b) Eastern Bengal (State) railway (5'6", 3'33" and 2'6" gauge sections)—contd.

Calendar y	oar.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Intorest,	Annuity.	Company's share of surplus profits.	Gain or loss to the State.	Remarks.
1879 . 1880 .		Rs. 6,23,44,476 6,33,72,354	Rs. 60,22,272 66,91,060	Rs. 25,79,314 33,75,186	4·11 5·33	Rs. 28,51,165 29,27,692	Rs	Re. 3,67,326 5,01,050	Ba. 6,39,177 87,456	
1881 . 1882 . 1888 . 1884 .	:	6,39,51,905 6,50,12,846 7,01,85,023 6,58,68,000 7,31,60,273	75,05,736 85,79,404 80,73,465 78,12,979 72,85,916	42,86,406 47,17,459 47,10,716 24,80,526 25,25,336	6:70 7:26 6:70 3:77 3:45	28,50.922 27,92.607 29,48,783 15,92,486 21,82,794	3,50,920 7,22,920	8,94,125 8,95,929 4,08,223	+ 6,11,359 + 10,29,528 + 12,63,710 + 5,37,120 - 3,×0,379	
1886 . 1887 . 1888 . 1889 .	:	8,00,56,752 8,11,53,166 8,59,00,629 8,79,71,516 10,00,68,646	82,73,918 94,30,393 1,05,19,210 1,11,76,674 1,14,78,382	30,89,720 45,04,783 55,25,424 <b>5</b> 61,91,625 60,70,323	3:86 5:55 6:44 7:04 6:07	24,34,239 41,71,008 28,83,744 30,15,703 30,96,150	19,04,750 14,90,152 20,11,011 20,43,953 18,14,110		-12,49,269 -11,56,378 +6,30,669 +11,28,069 +11,60,063	
1891 . 1898 . 1893 . 1894 .	:	10,31,46,023 10,60,47,429 10,68,29,000 10,78,52,685 10,71,92,132	1,26,75,446 1,15,56,446 1,20,51,147 1,40,15,726 1,15,09,739	65,32,100 62,33,727 66,35,138 83,53,549 89,74,474	6:33 5:85 6:21 7:78 8:37	33,97,743 38,86,181 39,53,310 41,01,624 41,50,415	17,51,621 16,5 <b>9,922</b> 16,49,185 18,91,850 18,72,565	  	+ 13,82,736 + 6,93,624 + 10,32,643 + 23,60,035 + 29,51,494	Represents pa
1896 1897 1898 1899	` .	10,97,80,618 11,47,69,205 11,78,51,619 12,16,19,777 12,58,52,617	1,50,81,670 1,47,62,233 1,47,17,879 1,56,12,426 1,71,00,460	90,02,286 80,60,612 83,35,064 83,01,083 92,40,424	8:20 7:02 7:07 6:82 7:35	41,06,132 42,80,508 43,89,856 45,00,276 47,02,516	17,56,150 16,53,278 15,75,020 15,62,391 15,66,769	  	+ 31,40,004 + 21,26,831 + 23,70,688 + 22,38,116 + 29,77,139	ment made the Brahm putra-Sultan pur Branch Railway Con pany up to I
1901 . 1902 . 1903 . 1904 .		13,19,95,226 13,99,82,381 13,91,79,763 15,89 84,505 19,04,12,932	1,65,99,440 1,78,93,098 1,81,52,429 1,94,63,098 2,03,73,194	83,08,251 91,48,340 88,57,694 86,23,372 96,19,904	6:20 6:54 5:94 5:55 5:05	41,11,665 41,25,883 47,10,867 50,38,995 56,25,038	28,37,123 23,29,895 23,83,377 28,33,925 23,83,780	*33,597	+ 18,59,498 + 23,94,562 + 18,12,850 + 14,16,945 + 16,57,836	pany up to 1 April 1904, account of st plus profi and other a justments.
1906		20,23,66,593	2,16,31,081	1,06,08,661	5·24 TABI	63,28,666	23,83,925		+ 19,46,070	
		<del></del> 1	3	(a)	1			3 (b)	<del></del>	
Calend	lar j	ear. and Co	en, Southern mtral sections 6" gauge).	Calcutta and 5 Eastern soci (5' 6" gaug	ion (S	ern Bengal tate) "gauge).	Kannia-Dhurl (2′ 6′ gauge	Kauma-Di and Gauha including t Krishnaga Kurigram the Britisi the Santr	n. Behar and nubrisections at extension, the Kanaghat r and Teesta- brinches and h section of abart exten- ty and 2'8"	Dacca section (8' 34" gauge).

										X 11 ()1112	11.						
					1		3	(a)					3 (b)				
•	Cal	enda	r	year.		Eastern, and Centr (5' 6" p	al sections (auge).	Calcutta a Eastern (5' 6" g	Hertion	Norther (Sta (3' 3{" ;		Kannia- (2′ 6′ <sub>1</sub>	Dharlla rauge).	Kauma-Dho and Gauhat including th Krishnagar Kurigram b the British	Behar and ibrisections i extension, io Bunghat and Teesta- rinches and section of barr exten- " and 2' 6"	Daoca s (8' 34" j	
					- 1	Earnings per mile per week.	Pro: of exp: to earnings.	Farnings per m:le per week	Pro: of exp: to earnings.	Earnings per mate per week.	Pro: of exp. to carnings	Earnings per mile per week.	Pro. of exp: to earnings	Earnings per mile per week.	Pro. of exp: to carnings	Earnings per mile per woek	Pro: of exp: to earnings.
					١	Rs. 94	1	Rs.		RsJ		Rs.		$\mathbf{R}\mathbf{s}$ .	ļ	Rs.	İ
1862 1853		•	•	•	٠1	119	55.59 48.43	36 58	128.39		•						
1864		:	:	:	1	176	53-67	53	137:03	l :::				:::	:::		
1865					. [	233	48.98	75	114-32				:::	i :::		:::	
1866					. 1	243	51.05	79	118:59	l		<b>.</b>	<b></b>	1.			1
1867			÷		-1	279	48.71	64	133.60					<b>'</b>		:::	
1869		•	٠	•	٠	308 313	46:33 50:29	60	173-12								
1869 1870		•	٠	. •	٠,	335	55.69	55 55	145.54 104.88		• • • • • • • • • • • • • • • • • • • •			•••	•••		
		•	•	•	1		56.01	1						•••			
1871 1872		•	•	•	·I	× 270	66.60	40	90.82						•••		***
1873		•	:	:	1	377	49.08	70	102.56	l :::	·				:::		•••
1874		:				483	52.18	GR.	78.35	l :::		i :::					***
1875			•	•	٠1	356	62.16	71	80 48								
1876					٠I	401	43.66	68	108.62				<b>.</b>				l
1877				•	. [	529	41.07	81	81.74	20	140.29				•••	l :::	***
1878		•	٠	•	٠,	512 494	43.71 45.97	96 92	75.08	81	75:31	•••			***		
1879 1880		•	:	•	1	540	41.81	98	71:32	101	99-96 60-10				•••	1	•••
1881		•	•		1	621	40.91	104	1				٠.٨	•••			
1882		•	:	•	:1	611	40.60	130	66.13 97.42	137 160	51·23 49·01	25	92.97	•••	•••		•••
1888		:	:		П	466	50.14	109	51.97	169	49.20	33	81.19		•••	:::	
1884					٠I	422	54.06		را	156	69-93	39	78.26				***
1885		•	•	•	٠l	380	61.25	Included	with Fant-	153	70.16	31	107.29			47	141.12
1886					ı	403	61.97	rections.	Southern	189	52.85	29	122-87			56	333,45
1887		:	:	:	П	268	52-23	Peccions,		100	02 00		122 07			30	111:47
1888		•			. 1	546	47:47			Included	with Eas	stern and	Southern	Included	with Easte:	rn and So	thern seo-
1889		•	•	•	٠l	563	44.60				, acct	ions.			tio	ņя.	
1890		•	•	•	٠.	521	47-13	•••									
1891		•	٠	•	٠I	562 562	48.61	•				•••		181	55:48	93	62-10
1892 18#8		•	•	•	٠.	529	44·32 43·71	. •9		•••				165 18 <del>2</del>	47·32 45·17	85 96	61·40 62·41
1894		:	:	:	1	621	40.33							191	39.14	112	54.46
1895				•	٠I	649	85.97		, May				.,,	199	40 29	320	51.49
1896					٠.	676	39.74	l	<b></b>			1		212	40-04	115	53.27
1897				•	٠I	675	46.48							19,5	42.41	114	55-92
1898 1899		•	٠	•	١.	652	41.86							201	44 88	129	51.68
1000		:	:	:	1	649 689	49:30 47:75	:::			•••			218 245	42·21 42·14	131 146	55.78 58.83
1901		-	•	•		678	\$0.89			,				225	46.01	187	1
1902		:	•	:	:1	728	48.18	` ***				· · ·		225 235	48.65	146	65·12 62·12
1908			:	:		707	50.27	1 :::		:::				239	50:14	144	78.25
1904		•		•	٠I	751	59.14	•••					,,,	233	55.49	145	67.62
1905		•	•	•	٠l	618	54-61	•••			.,,	***	•••	241	48.77	155	67.28
1906		•	•"	*	٠I	545	58 91							243	24.08	190	56.74
,				,	•	1		1			l i	I	,			•	•

# History of railways constructed and in progress. [For Indox see page 112.]

 $\textbf{N} \textbf{umber} \ \ \tfrac{\text{Main head 3}}{\text{Sub-heads (a) to } cd)} \ . \ \ \textbf{EASTERN BENGAL (STATE)} \ \ \textbf{RAILWAY SYSTEM} -- contd.$ 

3 (a) and (b) Eastern Bengal (State) railway (5' 6", 3' 3\frac{3}{4}" and 2' 6" gauge sections)—concld.

Statistics of working-concld.

The tables below show the statistics of working of the Central section, the Brahmaputra-Sultanpur and Ranaghat-Krishnagar branches before they were purchased by the State.

Central section (late Bengal Central railway) (5' 6" gauge).

						•	TABLE 1.				Таві	E II.
	Calend year			Cupital outlay to end of each year.	Gross earnin	Net carnings.	Percentage on capital outlay.	Interest.	Company's share of net earnings	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
881 882 883 884	:	:	:	Rs 10,51,983 46,55,955 79,36,235 90,54,719	Rs.  1,07,954 4,54,837	R-,  		Rs. 51,616 1,85,534 3.17,449 3,62,189	Re	Rs. 51.616 1,85 534 3 58,839 4,81,871	Rs.  64 76	136·50 126·31
885 886 987 \$58	. * : :	:	:	90,04,061 89,65,705 91,09,422 92,53,170	5,95,553 5,67,343 6,18,194 7,12,594	8,233 - 42,528 - 7,928 1,58,145	0 09  1 71	3,60,162 3,75,210 4,60,840 5,19,942	::	-3,51,929 -4,17,758 -4,68,768 -3,61,797	82 87 100 110	98:46 102:70 101:23 77:82
889 890 891 892	:	:	•	94,46,671 96,88,212 99,41,845 1,00,65,784	7,37,101 • 6,67,804 8,11 6 63 7 69,347	2,05,9 <b>65</b> 2,45,907 2,27,736 3,12,963	3°13 2 54 3 90 3 11	5,18,693 4,39,962 4,72,483 5,30,251	53,992 73,429 74,600	-2,22,765 -2,53 047 -2,18,175 -2,91,948	113 103 125 118	59:85 63:18 59:62 59:33
8 <b>93</b> 894 895 896	:	:		1,00 88 983 1,01,41,004 1,01,77 466 1,06,88,927	7,83,529 8,20,179 9,47,331 9,33,563	9,14,992 2,41,182 2,98,569 3,44,465	3 13 2 37 3 92 8 20	5,57,007 6,11,415 6,08,944 5,69,175	79,647 85,023 91,306	+3.01.662 +3.70.2 3 +2.95.158 +3.16,016	121 126 146 144	59:80 60:92 57:90 62:85
997 898 899 900	:	:	:	1 17,36,610 1,23,38,300 1,26,78,629 1,26,9 <b>6</b> ,415	11,38,199 10,21,657 11, 3,680 13,33,119	5,16,972 8,68,008 4,11,618 5,50 699	4°10 2°98 3°48 4°34	5,36,800 5,19,231 5,07,035 5,04,985	95,271 1,20,642 97,581 1,21,611	-1.15,158 -2.71,865 -1,62,863 -78,897	175 158 158 185	56 98 64 98 61 23 58 70
901 902 903 904 905 {	Int he			1,29,74,075 1,31,11415 1,31,55945 1,31,50,812 1,31,77,027	11,05,113 13,17,214 15,08,506 15,59,668 6,66,363	6,42,940 5,73,918 5,07,425 5,89,679 1,58,575 Amalgamatec	4:96 4:08 3:85 4:10 1:0 1 with the Easte	5 08,291 5,11,298 5,15,051 5,15,679 4,475 rn Bengal (S	1,46,144 1,53,667 1,21,830 1,36 567 36 525 fate) railway.	-11.495 91.047 -1.29,456 -1.06,367 -1,15,575	194 182 209 216 181	54°25 56'43 60°36 65 40 76°20

# Brahmaputra-Sultanpur (3' 33" gauge) branch.

						ጥ	ABLI I,				Таві	ь П.	
Cal	enda	r yo	ar.	Capital ontlay to end of each year.	Gross carning .	Not carning s	Perceutage ou capital outlay.	Interest.	Company s share of net carnings.	Gain or loss to the State.	Darnings per mile por week,	Proportion of expenses to earnings.	Renarks.
				R.	Rs.	Rs.		Rr.	R∢.	Rs.	Rs.		
1897 1898 1699 1900	: : :	:	:	2 02,019 12,35,457 19,58,137 24,20 811 28,27,619	1,36,587 1,96,848	61,375	   	42,111		+ 18,961	 38 58 64	45.00 45.00 45.00	Not earnings during 1899 and 1800 were paid over to the Company and interests up to 1900 were charged to capital.
1902 1903 1904	:	:	:	29,17,093	2,40,424 2,54,379 Annalgar	1,32,233 1,59,908 nated with th	4:53 4:75 e Eustorn Ber	86,750   88,185 ngal (State) t	9,480 22,742 milway.	+ 36,003 + 28,981	78 82 	45:00 45:00	

#### Ranaghat-Krishnagar (2' 6" gauge) branch.

		,			Table I.				Тав	LE II.
**	Calendar year.	Capital outlay to end of each year.	Gross carnings.	Net earnings.	Porcentage on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week	Proportion of expenses to earnings.
1898 1899 1900 1901 1902 1903 1904	flat half	Rs. 7,22,369 7,27,800 7,51,809 7,51,157 7,51,158 7,48,657	Rs. 46,349 69,802 69,117 76,180 86,484 40,861	18s.  8,415 19,442 15,185 21,353 33,832 12,160 Amalgamat	1.16 2.59 2.02 2.84 4.55 ad with the E	Rs. 12,352 9,472 1,465 15,960 5,674 2,876 astern Bengs	Rs. 20,767 28,914 16,650 37,313 39,506 15,036 1 (State) rail	2·85 3·85 2·22 4·97 5·31	Rs. 59 66 66 72 52	81:84 71:95 78:08 71:97 60:96

# History of railways constructed and in progress.

[ For Index see page 112.]

Number Main head 3 EASTERN BENGAL (STATE) RAILWAY SYSTEM-contd.

# 3 (c) Mymensingh-Jamalpur-Jagannathganj Branch railway (3' 33" gauge)—

This line, which terminates on the Brahmaputra river, is connected with the Eastern section of the Eastern Bengal (State) railway at Goalundo by the India General Steam and River Steam Navigation Companies' steamer services.

#### Details of construction-

This railway is 53°22 miles long. Its construction was sanctioned in 1993 and it was opened in 1899.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 50 lbs. to the yard, laid on sal sleepers

Ballast.—The line is ballasted throughout with brick.

Fencing.-The line is fenced only at stations and through the town of Mymensingh.

Curves.—The sharpest curve is of 2,864 feet radius.

Gradients.—The ruling gradient is 1 in 300.

#### Terms of contracts-

The Mymonsingh-Jamalpur-Jaganuathganj branch railway is worked under the following contracts:-

Contracts of—6th January 1897 (between the Secretary of State and the India General Steam Navigation Company) for the construction and working of the Mymensingh-Jamalpur-Jagan-nathganj tranch railway.

3rd October 1899 (between the India General Steam Navigation Company, the India General Navigation and Railway Company and the Secretary of State) for the transfer of the domicile of the Mymensingh-Jamalpur-Jagannathganj branch railway office from Calcutta to London.

The general conditions of the contracts are as follows:-

Government aid.—Government in respect of each year allow to the Mymensingh-Jamalpur-Jagannathganj Branch Railway Company, by way of rebate on the share attributable to the Eastern Bengal (State) railway of the receipts from traffic interchanged between the two railways, such a sum not exceeding in any year the net earnings from traffic except railway stores interchanged between the Eastern Bengal (State) railway system and this railway, as will, together with the net earnings of the Compuny for the year, make up an amount equal to interest for the year at a rate of 3½ per cent. per annum on the actual capital expenditure. Land has been provided free of charge.

Currency of contracts.—Government may determine the contracts on 12 months' notice either on the 31st December 1919, or at the end of any subsequent period of 10 years or on the 31st December 1948, the Government paying, if contracts are determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly not carnings, not including rebate payments, during the three years prior to determination, but not exceeding by more than 20 per cent., or not being less than, the total capital expenditure; and if determined on the 31st December 1948 (50 years), the total amount of such capital expenditure.

Power of Company to surrender contracts .-- Nil.

Terms of working.—After deduction of 45 per cent. of the gross earnings for working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), in which is included all such legal expenses of the Company as are properly debitable to revenue, the balance is payable to the Company.

Rates and fures. To be arranged between Government and the working agency within the maxima and minima rates in force on the Eastern Bengal (State) railway.

#### Statistics of working-

										TABLE	I.					Таві.	z II.
		С	alond	ar y	oar.				Capital outlay to end of oach year.	Gross carnings,	Not carnings.	Percentage on capital outlay.	Rebate from E. B. S. Ry.	Total income.	Percentage on capital outlay.	Earnings per mile per week.	Pro: of cap: to carnings.
									Re.	Rs.	Rs.		Rs. •	Rs.		Rs.	
1896 1897 1898 1899 1900	:	:	:	:	:	:	:	:	1,950 5,54,688 10,44,638 16,11,248 18,78,395	7,660 66,499 1,62,028	 4,213 96,575 80,11 <b>6</b>	0·40 2·27 4·74	::: ::: :::	4,213 36,575 89,116	0·40 9·27 4·74	 27 35 58	45:00 45:00 45:00
1901 1902 1908 1904 1905	:	:	*	:	:	•	:	•	23,28,917	1,67,756 2,05,251 2,22,825 2,21,168 2,16,642	92,265 1,12,888 1,24,993 1,24,312 1,18,748	4·43 4·94 5·37 5·29 4·98	  	99,265 1,12,888 1,24,993 1,24,312 1,18,748	5.29	60 74 82 81 81	45.00 45.00 48.90 43.79 45.19
1906	;	:							24,15,248	2,72,929	1,50,030	6.21		1,50,030	6.21	103	45.03

# 3 (d) Cooch Behar railway (2' 6" gauge)-

## Details of construction-

This railway is 83°60 miles long, convisting of main line, 22°15 miles, and branch, 11°45 miles known as the Native State section of the Cooch Behar-Santrabari extension. Its construction was sanctioned in 1891 and it was opened throughout in 1900.

Permanent-way:—The line is laid for 19.55 miles with 25-lb. and for 1.83 miles with 411-lb. steel rails on sal and pyinkado sleepers, and for 12.22 miles with 40-lb. iron rails on sal sleepers. All rails are flat-footed.

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head 3}}{\text{Sub-heads }(a) \text{ to }(\overline{d})}$ . EASTERN BENGAL (STATE) RAILWAY SYSTEM—conold. 3 (d) Cooch Behar railway (2' 6" gauge)-concld. Details of construction -concld. Ballast .- The line is laid without ballast. Fencing.—The line is unfenced.
Curves.—The sharpest curve is of 2,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract-

The Cooch Behar railway is worked under the following agreement:—
\*\*Agreement—of 15th June 1903, having effect from the 1st January 1901, (between the Secretary of State and His Highness the Maharaja of Cooch Behar) for working.

The general conditions of the agreement are as follows :-

Government aid .- The line is the property of the Cooch Behar State. .

Currency of agreement. -The Eastern Bengal (State) railway to maintain and work the Cooch Behar State railway

for a period of five years from 1st January 1901.

Terms of working.—The Eastern Bengal (State) railway to receive 40 per cent. of the gross carnings for maintenance, and working; provided that when the stock of the Eastern Bengal (State) railway is used for the conveyance of any traffic on the Cooch Behar railway, the Eastern Bengal (State) railway will receive and retain up to, but not exceeding, 45 per cent. of the gross earnings obtained from the use of such stock. The percentage of working charges will cover the cost of 'New Minor Works' up to the limit of Rs. 30 per mile per annum.

Rates and fares .- The Eastern Bengal (Ste'e) railway alministration have full control over rates and fares.

\* [Norn.-The revision of this agreement is under consideration.]

Statistics of working-

													l'abl	ьI.						TAB	LE II.
		•				Cal	enda	r yea	r.							Capital outley to end of each year.	Gross ogenings.	Net carmngs.	Per cent. on capital outlay.	Earnings por mile per wock.	Pro : of exp : to earnings.
basetur	. •					.~					a		-			R.	Rs.	Rs.		Rs.	
1891 1892 1893 1894 1895	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	14,685 4,69,136 6,65,172 7,14,818 7,30,953	 5,846 40,280 53,174	 2,455 5,576 19,200	  1 20 2 63	  13 85 46	 188-94 78-71 63-89
1896 1897 1893 1899 1900	:	:	:	:	:	:	:	:	: : :	:	:	:	:	:	:	7,66,714 9,01,219 10,32,938 12,99,031 12,83,906	70,128 64,162 66,124 82,773 94,792	38,570 35,344 6,687 43,073 51,602	5:03 8:92 6:65 3:02 4:02	61 51 57 53 50	45.00 45.00 45.00 47.95 43.41
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:	:	:	: : :	:	:	:	:::::::::::::::::::::::::::::::::::::::	13,95,7:6	1,27,196 1,24,741 1,42,540 1,47,575 1,48,488	71,667 74,452 53,834 86,996 87,319	5·35 5·33 5·62 5·91 <b>5</b> ·88	72 71 82 84 . 85	41·48 40·31 41·19 41·05 41·20
1906		:		•					•			•	•			14,87,786	1,68,751	77,815	5.23	97	53.80

Number Main hoad 4 Sub-hoads (a) to (d). EAST INDIAN RAILWAY SYSTEM—

Chairman .- Bazett Wetenhall Colvin, Esq. Secretary.—Charles W. Young, Esq. Offices.—Nicholas Lane, London, E. C.

TI-lam assurbungtion

Lines comprising the system.—The East Indian railway system is made up of-

	(a) East Indian railway (5' 6" gauge) (b) Delhi-Umballa-Kalka railway (5' 6" gauge) (c) South Behar railway (5' 6" gauge) (d) Tarkessur railway (5' 6" gauge)		Open line. Miles. 2,165-04 162-36 78-76 22-23	Under const or sanction construct Miles 258'7	od for ion.	Total. Miles. 2,423-76 162-36 78-76 22-23
•		Total	2,128:39	258.7	2	2,687.11
	Jone line over Foreign lines: — Agra East Bank to Agra Fort, Rujpntana-Mulwa nainati to Bruce Bridge Junction and Chitpora, Moghal Sarai to Bonares Cantonment, Oudh and k	ailway astorn Bengal (Stat Johnkhand (State) ra	e) railway) fo allway, for pas		only .	Miles, 1.00 84.50 10.00 45.50
1	Great Indian Poninsula railway, Agra to Taudla	r and goods trains for passenger train for trains only rains only	: ; :		a goods	0·30 0·50 1·00 12·75 0·97 0·52
	North-Western and Oudh and Robilkhand (State)	all manner Olivania ha J A		ins.	a goods	0.68 0.38 13.00*

History of railways constructed and in progress. [For Index see page 112.]

Number  $\frac{M_{ain \ head}}{Sub-heads} \frac{4}{(a) \ to}$  EAST INDIAN RAILWAY SYSTEM—contd.

4 (a) East Indian railway proper (5' 6" gauge)-

Details of construction-

The open mileage of the East Indian railway proper is 2,165.04 miles. This may be divided into (1) main line (Howrab to Delhi), 955.08 miles; (2) Grand Chord line (Sitarampur to Moghal Sarai), 281 miles; (3) Loop line (Khana junction to Kiul), 250.39 miles; and (4) branches, 678.57 miles. Of the above 518.27 miles are double and 2.20 miles triple line.

There were in addition 258.72 miles of single line sanctioned for construction, of which 143.32 miles are actually under construction. 13.60 miles of existing single line are also in course of being doubled. The first sanction to constructing the main line was given in 1851 and it was opened throughout in 1871. The Loop line was opened in 1862 and the Grand

Permanent-way.—The main line from Howrah to Delhi, including the Grand Chord, the Loop line from Khana junction to Kiul, the Jubbulpore branch, Jharia branch, Ondal loop, Ikrab branch, Giridih branch, Patna-Gya branch, Baran-Daltonganj branch, Agra branch and Shikohabad-Parukhabad branch are laid with steel rails throughout. A few short branches are still laid with iron rails, but these are being replaced with second-hand steel rails removed from the main line in the course of relaying operations.

On both up and down reads of the main line from Howrah to Mokameh, a distance of 284 miles, the rails are 85-lb. bull-headed, with the exception of a few short lengths which still remain to be relaid. S5-lb. bull-headed rails have also been laid on the single line between Moghal Sarai and Khaga, a distance of 147 miles, and Sitarampur to Paharpur, a distance of 134 miles. The rest of the main line and branches are laid with double-headed rails weighing 75 lbs. per yard.

As at present laid, about thirty per cent. of the sleepers are wood and the remainder are iron. The wooden sleepers

principally consist of sal and deedar; but of late Jharrah and Australian hard wood sleepers have also been put into the road. The chairs are east iron and vary in weight from 36 to 51½ lbs. The iron sleepers are of the Denham Olpherts' pattern and weigh about 252 lbs. each.

Bullast.—The line is ballasted throughout with stone.

Pencing.—The line is fenced throughout, except on the Damuda, Ikrah, Salaupur, Chanch, Pandra, Azimganj, Baran-Daltonganj and Shikohabad-Farukhabad branches, the Ondal loop and the Ondal-Sainthia and Dhanbaid-Jharia chords. The Grand Chord is being fenced.

Curves.—The sharpest curve is of 1,525 feet radius.

Gradients.—The ruling gradient of the main line is 1 in 300, except between Rancegunge and Luckeeserai where it is 1 in 200 with a 1 in 100 banking section, between Simultala and Jhejha, and on the Grand Chord the ruling gradient is 1 in 200 (compensated on curves), with a 1 in 80 banking section between Gurpa and Gujhandi. The ruling gradient of the Loop line, the Ondal-Sainthia Chord and the Jubbulpore branch is 1 in 200. Terms of contracts-

The railway is worked under the following contracts:-

Contracts of -22nd December 1879.—East Indian Railway Company's principal contract.

10th November 1893.—Contract for the incorporation of the following State branches in the undertaking :- Ghazipur (Dildarnagar to Tarighat) ; Bhadreswar (Bhadreswar junction to the right bank of the Hooghly); Mokameh (Mokameh junction to the Ganges); Digha Ghat (Baukipore junction to the right bank of the Ganges at Digha Ghat); Jharia (Barakar to the Jharia coal-fields); Toposi colliery (Toposi to Khairabad, Nundi to Panuria and Salaupur to Shamdi); Gya (Bankipore to Gya); and Azimganj (Nalhati to Azimganj).

26th February 1896.—As to debenture capital 22nd November 1897.—Contract for the construction and working of the Moghal Sarai-Gya railway. 14th November 1899.—Contract modifying that of 1879.

The general conditions of the contracts are as follows :-

Government aid.—Government guarantee interest at 4 per cent. in sterling on £6,550,000 (being capital representing the deforred portion, i.e., one-fifth of the annuity payable under the terms of purchase). All capital is provided either by Government or by the Company by the issue of debentures or debenture stock, in such manner or on such terms as to interest or otherwise as the Secretary of State determines.

Terms of contracts .- The lines were purchased from the East Indian Guaranteed Railway Company by the State on the 1st January 1880, and all the contracts then subsisting between the Secretary of State and that Company (except those relating to debentures or debenture stock) were determined. The purchase

price was £32,750,000,\* and it was provided by the Purchase Act that this should be paid in the form of a terminable annuity of the amount of £1,473,750, ... 26,200,000 6,660,000 Company's stock at date of purchase Premium of 25 per cent. ... 82,750,000 payable from the 1st January 1880 to the 14th February 1958. One-fifth of the annuity was deferred, and the holders of this portion (representing a capital

sum of £6,550,000), constitute the present East Indian Railway Company, which, since the purchase, has worked the railway for the Government under the contract of 1879 as modified by the contract of 1899. The deferred annuity holders receive, in lieu of the annuity, interest at 4 per cent. per annum on £6,550,000 and a share of the surplus profits of the railway. On the determination of the contract, the portion of the annuity that has been deferred will become payable for the period remaining up to the 14th February 1953.

Currency of contracts.—The contract of 1879 terminates on the 31st December 1929, but either party may determine the contract at the end of the 20th or at the end of any succeeding 5th year (computed from the 1st of January 1880) on giving two clear years notice in writing to the other party of this intention.

Nors .- Government relinquished their right to determine the contract at the end of the 20th year, and by mutual agreement the principal contract will not be determined before the 31st December 1919.

Power of Company to surrender contract. - See currency of contracts.

Terms of working .- After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the surplus profits (after payment of interest on debentures, annuity, interest on deferred portion of annuity, interest due to Government on capital advances, etc., and contribution to the Provident Fund) up to a sum of 25 lakhs of rupces are divided

# History of railways constructed and in progress: [For Index see page 112.]

Number Main head 4 Sub-heads (10) to (11). EAST INDIAN RAILWAY SYSTEM—contd.

Net earn-

ings.

4 (a) East Indian railway proper (5' 6" gauge)—concld.

Gross

carnings.

Terms of contracts--conold.

Capitul outlay to end of each year.

in proportion of four-fifths to Government and one-fifth to the Company. Any excess over 25 lakhs of rupees is divided in proportion of four-ten-fifteenths to Government and one-fifteenth to the Company.

\*Rates and fares.\*\*—Cortain maxima and minima rates and fares have been fixed within which the Company is

permitted to vary rates.

Statistics of working -

Colendar

year.

TABLE I,

Interest.

Annuity.

Company's slure of net

carnings.

Gain or loss to the State.

REWARKS.

Per cent, on capital outlay,

											¢	- 1				1		
1879 1880	:	34,32.7 34,35,7	7 360	Rs 4,35,4 4,35,0	6,730	R- 2,86,1 2,86,7	4 479	8.34 8:05	1,65.	Rs. ,74,363 ,06,263	R 		Rs. 61,25,97 17,72,69	7 + +	Rs. 59,14,23 70,93,08	2 ( * In	terest in	
1831 1882 1883 1884 1885	:	34,87,6 35,07,2 35,21,9 35,57,3 35,85,9	1,155 1,304 8,760	1,51,1 4,71,1 4,94,6 4,38,3 4,63,8	7,594 7,085 18,714	3,08,3 2,96,5 3,11,5 2,73,2 3,30,1	67,086 (0,980 (2,003	8'84 8 46 8'84 7'68 9'21	38	,05,426 ,81,764 ,16,170 ,58,035 ,13,062	1,73,92,0 1,73,92,0 1,72,57,7 1,78,50,4 1,79,77	00 72 59	20, <b>6</b> 3,86 17,88,07 19,99,73 11,72,32 16,29,50	3 + 1 + 1 + 1 + 1	82,73,74 71,95,24 80,77,30 47,41,18 95,93,48	3   ge 9   se 7   8	udesannu es, which c parated.	
1886 1887 1888 1889 1590		36,06,8 36,12,1 36,09,2 36,19,2 36,21,2	5,918 4,631 27,530 12,300	4,66,7 4,60,6 4,51,7 4,19,5 1,40,5	0 853 5,641 6,903 7,901	3,05,1 2,13,3 3,03,3 2,91,0 2,98,2	3,359 34,263 5,075 6,230	8:16 8:67 8:10 8:12 8:24	39 40 40 41	,91,104 ,70,944 ,73,097 ,81,108 ,83,278	1,89,50,13 1,92,13,3 2,03,43,5 2,09,60,0 2,03,43,5	37 33 30	14,97,27 15,87,25 11,64,69 8,31,34 10,37,01	6 +	60,74,84 64,62,73 47,53,55 31,28,77 42,62,98	24		
1891 1892 1893 1894 1895	•	36,15,1 36,24,9 36,91,2 37,24,3 37,82,1	18,827 07,506 20,357 36,356	4,56,8 4,91,4 5,08,4 5,26,8 5,41,5	87,001 11,600 14,654 89,485	3,60,3 3,48,1 3,60,9 3,64,2 3,73,3	67,028 6,719 04,293 96,405	9:97 9:60 9:78 9:78 10:00	43 37 41 43	1,90,426 1,25,754 1,26,889 1,97,988 1,70,681	1,86,91,0 2,06,47,1 2,34,46,7 2,43,89,5 2,61,01,1	54 64 80 82	26,45,39 20,88,76 17,04,12 15,39,76 14,29,07	2 + 1, 0 + 5 + 7 +	,03,04,15 80,55,04 68,16,49 61,59,06 57,30,81	6 1 19 18		
1896 1897 1898 1899 1900	*	38,27,0 39,39,0 40,71,9 42,70,4 41,28,4	6,003 01,173 04,336 10,208	5,10,6 5,88,9 5,97,9 6,35,1 6,81,7	9,142 24,013 26,060 15,974	3,67,7 4,11,9 1,08,0 4,26,6 1,17,1	77,652 03,469 07,269 60,018	9 61 1053 1002 9 99 1610	46 45 50	5,90,562 5,20,238 5,16, 44 5,64,902 5,18,054	2,18 : 9,4 2,47,34,4 2,32,64,5 2,21,45,5 2,15,60,9	55 06 33 16	12, £5,73 23,87,76 24,99,2 £ 30,09,92 18,09,10	3 + 3 + 4 + 50 + 1,	49,81,93 95,51,06 99,96,97 20,39,64 53,27,45	28 80		
1901 1902 1903 1904 1905	:	45,66,5 47,06,4 48,79,6 50,26,6 52,58,7	10,852 31,154 19,029	7,03,9 6,77,3 6,99,7 7,59,7	18,713 72,699 71,544	4,57,1 4,29,8 4,63,9 5,05,6 4,81,8	0,8 (3 )8,122 (1,422	10:01 9:13 9:52 10:06 9:16	71 80	5,46,878 531,492 5,46,971 523,978 5,75,860	2.16,82,3 2,16,46.8 2,16,15,6 2,16,15,0 2,16,15,0	68 00 00	18,51,45 16,19,96 16,82,23 20,64,27 18,62,07	$     \begin{array}{c cccc}                                 $	,56,32,62 ,26,79,50 ,56,54,82 ,88,61,16 ,60,32,10	98 90 18		
1906		54,79,2	8,490	8,02,5	0,910	1,87,9	0,504	8.20	1	,1 1,920	2,16,15,0	00	18,50,03	89 +1,	,59,00,51	15		
<del></del>		East I:		1	a-Uja gaugo).	1	dhati gango).	Dildar Ghaz (5′ 6′′ g	ipur	.E 11.	i	Indian gauge).		na-Gya gaugo).	ţ	ilhati gaugo).	Cha	nagar- zipur gange).
Calenyear	r.	Earn- ings per mile per week,	Pro: of exp: to carn- ings.	Earn- ings per mile per week.	Pro : of exp : to earn- ings.	Earn- ings per milo per week,	Provef exp: to earn- ings	Earn- ings per mile per week.		Calendar year.	Earn-	Pro : of exp : to earn- ings.		Pro : of exp : to earn-ings.		Pro : of exp : to earn- ings.		Pro: of exp: to earnings.
1654 1855		Rs. 131 108	62·18 51·97	Rs		Rs		Rs, 		1881 1882 1883 1884	Rs. 578 601 630 558	31:85 36:94 36:95 37:61	Rs. 178 184 153 174	65:11 60:51 51:93 57:48	Ra. 47 51 57 55	79·20 73·05 69·63 90·94	73 80 75	99·52 85·24 49·87 58·87
1856 1857 1858 1859 1860		167 232 279 258 231 240	40.62 38.12 40.49 44.77 48.36 46.49							1895 . 1886 . 1887 . 1888 . 1889 . 1890 .	589 591 583 567 557 538	31·59 31·70 31·70 33·24 34·59 31·35	174 180 178 168 173 174	52·52 52·01 46·53 47·97 48·70 45·80	54 59 65 74 73 71	85·29 70·57 78·39 78·18 78·01	76 77 71	52·28 52·05 40·45 91·13
1861 1862 1868 1864 1865		192 222 253 311	58:81 55:01 50:79 44:82			36 41	48 88 63:28			1891 1892	615 587	27:21 28:47	201 193	42·76 42·94	66	62:97 rted to	:::	
1866 1867 1868 1869 1870	:	374 369 346 899 424	44·24 48·91 44·88 44·42 43·68			36 45 57 60 60	105:15 68:81 83:60 59:64 48:77		*	1893 1894 1895	584 604 608 597	27:44 30:87 31:07 81:98		 	::	-		•••
1871 1872 1878 1874 1875	•	338 369 382 474 374	43°36 41°44 38°75 35°70 39°58			55 53 60 61 57	58:07 57:11 60:06 67:22 76:42		***	1897 1898 1899 1900	649 658 697 708	29:47 31:76 32:84 34:78		 	:::			
1676 1877 1878	:	452 505 507 552	35:08 81:85 35:69 82:65	 121	55:84	54 64 64 65	111·15 100·47 79·11 67·56			1902 1903 1904 1905	687 692 749 788	36·55 83·64 83·39 35·74	::			***		***
1879 1880	:	849	83.04	162	26.18	49	105.33	56	128.83	1906	(a) 732	(a)38·65				***		***

# History of railways constructed and in progress. [For Index see page 112.]

Main head 4 Number Sub-heads (a) to (1)

## EAST INDIAN RAILWAY SYSTEM—contd.

4 (b) Delhi-Umballa-Kalka railway (5' 6" gauge)-

Chairman .- Colonel Alexander Jerome Filgate, R.E.

Secretary.—C. E. Rutter, Esq. Offices.—17, Victoria Street, Westminster, S. W.

Details of construction -

This railway is 162.36 miles long. It was opened throughout in 1891.

Permanent-way .- The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on Denham Olpherts' cast-iron plate and wooden sleepers with cast iron chairs.

Ballast .- The line is ballasted throughout with stone.

Fencing .- The live is fenced throughout.

Curves.—The sharpest curve is of 1,010 feet radius.

Gradients .- The ruling gradient is 1 in 200, except for 15 miles from Kalka where it is 1 in 40.

Terms of contracts-

The railway is worked under the following contracts :-

Contracts of -2 4th January 1859 (between the Secretary of State and the East Indian Railway Company) for working. 12th February 1889 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction.

> 19th March 1890 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for raising of additional capital by the issue of debentures.

> 19th December 1895 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) conceding to the Company from the 1st January \$593 the 2 per cent. of gross earnings previously retained by Government.

> 24th July 1896 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for the provision of funds for capital works.

9th June 1897 (between the Sceretary of State and the Delhi-Umballa-Kalka Railway Company) guaranteeing interest at the rate of 31 per cent, on share capital. The general conditions of the contracts are as follows:—

Government and .- By the contract of 9th June 1597 Government supplement the net carnings of the Company for the year 1896 and each succeeding year by such an annual subsidy as will enable the Company, after payment of debegture interest, to pay a dividend of 34 per cent. per annum on their share capital. Land was also provided free of cost.

Currency of contracts. - The contracts may be determined by effluxion of time on the 31st December 1916, unless some arrangement is effected for continuing the working. Shou'd such arrangement be made, Government may determine the contracts on the 31st December of the 31st December of any subsequent tenth year. On determination Government are to receive possession of the railway, and to pay the Company a sum equal to 25 times the average yearly profits of the Company during the preceding five years. Subsidy payments by Government are to be excluded from the profits of the Company in calculating the price to be paid on purchase by Government.

Power of Company to surrender contracts.—Nil.

Terms of working .- Government undertake (through the agency in the first instance of the East Indian Railway Company) to supply the necessary rollings-tock and to work and maintain the line until the 31st December 1916, taking 48 per cent. of the gross receipts of the railway for the working agency (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' and a payment of Rs. 10 for every mile of line open to traffic to be made half-yearly to Government for supervision) and paying 52 per cent. to the Company. Surplus profits in excess of 31 per cent. per annum are divided equally between Government and the Company until Government bave been repaid advances of subsidy, with interest. Thereafter all surplus profits belong to the Company.

Rates and fares .- To be agreed upon from time to time between the Secretary of State and the working agency; but in the case of that portion of the line between Delhi and Umballa they are to be not more than the maximum, nowless than the minimum, rates and fares in force on the East Indian railway, and in the case of the portion between Umballa and Kalka not more than three times such maximum nor less than such minimum.

Statistics of working-

									TA	BLE I.					TAB	Lm II.
	C	alen	dar 3	car.				Capital outlay to end of each year.	Groza Groza	Net enra- ingu.	Percentage on capatal outlay.	Coveru- ment.	Total income.	Percentage of total income on capital outlay.	Earnings per milo por week.	Proportion of expenses to earnings
								Re	R4.	Ba.		R4.	Rs.		Ra,	
1889					•	•	•	59,90,835	•••	•••			•••	•••		
1890	•	•	٠	•	•	•	•	1,35,55,580	•••	• •		•••	•••			
1001								1,55,44,692	9.07,697	4,72,002	3.61		4,72,003	3 01	128	40.00
1891 1892	•	•	•	•	•	:	•	1.58,22,137	10.81,769	5,62,520	3.56	1	5,62,520	3:56	129	48-00
1004	•	•	•	•	•	-	•	1,55,21,600	11,98,509	6,23,224	401	***	6,23,224	4 01	143	48:00
1893 1894	•	•	•	•	•	٠	-	1,55,25,547	13,37,526	6,95,514	4.18	1	6,95,514	4 48	159	48:00
1994	•	•	•	•	•	•	•	1,65,06,120	14,60,519	7,59,470	4.90		7,59,470	4.90		48.00
1895	٠	*		•	•	•	•	2,00,00,120	12,01,010	1,00,110	1 300		1,10,210	3.00	174	48 00
1896			_					1,54,49,783	13,18,840	6,85,797	4.41		6,85,797	4.44	158	48-00
1897	•	•	•		·			1,53,26,585	15,73,319	8,18,126	5:34		8,18,126	5.31	166	48.00
1008	•	•	•	•	•	:	:	1,53,43,587	16,07,512	8,85,906	5.45		8,35 906	5.45	191	48.00
189 <b>6</b> 1 <b>899</b>	•	•	•	:	•		:	1,58,01,272	14,49,378	7,29,511	4.77		7,29,541	4.77	172	48.60
1900	•	•	٠	•	•	•		1,53,15,467	13,72,528	7,13,712	4.66		7,13,712	4 66	163	
1900	•	•	•	•	•	•	•	1,00,20,101	10,1 10, 12.17	1,117,112	200		1,10,112	200	10.1	48.00
1901			_	٠.	_			1,52,92,648	18,05,858	9,39,046	6:14	-	9,30,046	6 14	218	48-00
1902	•	•	•	•		•	- :	1,54,23,791	18,66,695	9,70,681	6.29		9.70.681	6 29	221	40.00
1900	•	•	•	•	•	•	•	1,55,49,998	18.30,960	9,52,009	6.13		9,52,099	6 12	216	48.00
1908	•	•	•	•	•	•	•	1,55,51,768	18,58,478	9,63,807	6.19	1	9,63,807	6.19	218	48.00
1904	•	•	•	•	•	•	•	1,56,07,499	20,16,936		6.72	***	10,48,807	6.72	210	48.00
1905	•	•	•	•	•	•	•	1,00,07,400	40,10,300	10,48,507	0 12	•••	10,20,001	0 (2	238	45.00
1000								1,57,26,838	20,04,218	10,42,194	6.63	***	10,42,194	6.63	237	40.00
1906	•	•	•	•	•	•	•	_,_,_,_,	,,,,,,,,	,,	1		1,,,	- 00	201	18.00

# History of railways constructed and in progress.

[For Index see page 112.] 

Main boad 4 EAST INDIAN RAILWAY SYSTEM -contd. Number Sub-heads (a) to (d)

4 (c) South Behar railway (5' 6" gauge)-

Chairman .- Sir Henry S. Cunningham, K.C.I.E.

Secretary .- E. Z. Thornton, Esq.

Offices. 45, Queen Anne's Gate, Westminster, S. W.

#### Details of construction-

This railway is 78.76 miles long. He connects Luckeeserai with Gya and was opened in 1899.

Permanent-way. - The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on wooden sleepers and cast-iron chairs, and Denham Olpherts' cast-iron plate sleepers.

Ballast .- The line is ballasted throughout with stone.

Fencing.—The line is fenced only near villages, at stations and for a short distance on each side of level crossings,

Curres. - The sharpest curve is of 3,000 feet radius.

Gradients.—The ruling gradient is 1 in 400.

#### Terms of contracts—

The railway is worked under the following contracts:-

Contracts of -7th August 1895 (between the Secretary of State and the South Behar Railway Company) for construction.
22nd August 1895 (between the Secretary of State and the East Indian Railway Company) for working.

The general conditions of the contracts are as follows:-

\*Government aid .- Government, in respect of each half-year, allow to the South Behar Railway Company, by way of relate on the share attributable to the East Indian railway of the receipts from traffic interchanged between the two railways, a sum not exceeding 30 per cent. of such share as will, together with the net carnings of the South Behar Railway Company, make up an amount equal to interest for the half-year at the rate of 1 per cent. per annum on the actual capital expenditure on the South Behar railway. For the purpose of calculating this rebate, the capital expenditure is to be regarded as not exceeding Rs. 120 lakhs, and the amount towards making up of which the rebate is to be allowed is to be limited to Rs. 2,10,000 in any half-year. Land was also provided free of cost.

Currency of contracts. - Government have power to determine the contracts on the 30th June 1919, or at the end of any subsequent period of 10 years from that date, by giving twelve months' notice. In case of such determination, the Government will pay to the Company in England ar amount equal to the total paid up capital in sterling, so far as such capital has been expended on the undertaking with the authority of the Secretary of State.

Power of Company to surrender contracts .- Nil.

\*Terms of working .- For the first two years after the opening of any section, the cost of maintenance was charged against capital, Government retaining only 35 per cent. of the gross earnings for providing rolling-stock and working the line, the remaining 65 per cent. going to the Company. Thereafter, Government retain 45 per cent. of the gross carnings (which may include any single item of capital expanditure, not exceeding Rs. 1,000 classed as a 'Minor Work' and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) to meet the cost of maintaining, stocking and working the line, the Company taking the remaining 55 per cent.

\*Rates and fures .- To be agreed upon from time to time between the Government and the working agency within the maxima and minima rates and fares in force on the East Indian railway.

[Nors.—It has since been agreed between the Secretary of State and the South Behre known Company that, in Lou of the net receipts as provided by clause 30 of the contract of the 7th August 1805, a fixed sum by way of rented at the rate of £50,000 per numeron as from the 1st January 1908 will be part to the Company by the Secretary of State. The clauses of the same contract relating to the application of greatermary, relate, not required, and there also excess similarly affected by the new agreement, will be causelled, and provision made by a new contract to the one and working of the same level, and the making of any alterations, improvements or additionally the Secretary of State, at this own 1834 and cost, free free countries or additionally affected by the Secretary of State, at this own 1834 and cost, free free countries of the countries of the company that the latter shall work the South Behar R thus year, part of the conductation, unstand of 200,000 pagable to the South Behar R thus y Company, together with interest at 33 per cent, on the Government advances for the purposes of the South Behar like Souring a charge against the net revenue of the undertaking.

## Statistics of working-

											TABL	ne T.						Т▲в	LE II.
~			Cal	onda	r ye	ar.					Capital outlay to end of each year.	Gross earnings.	Not earnings.	Percent- age on capital outlay,	Rebute from E. I. Ry.	Total income.	Percentage of total income on capital outlay.	Earnings per milo per week,	Proportion of oxpenses to carnings.
											Rs.	Rн	Rs.		Ra.	Rs.		Rs.	
.1895						•			•		5,17,983					<b>'</b>			•••
1896	_										30,88,036		ľ	,					
1897	•	:		·							62,72,315								•••
1898	•		- 1								97,45,791								•••
1809											1,18,16,730	2,03,328	1,32,163	1.12	33,403	1,65,566	1.40	101	35.00
1900	:	:	•	•	•	•	•	•	•	•	1,23,15,110	4,67,133	3,03,636	2 47	1,44,104	4,48,040	3.64	111	85.00
											1,23,66,533	6,11,970	3,08,822	2.50	1,28,082	4,36,904	3:53	125	
1901		•	•		•	•	•	•	•	•	1,19,88,612	4,99,809	2,74,895	2 29	1,35,445	4,10,340	3.42		40.03
1902	•	•	•		•	•	•	•	•	•	1,20,01,897	5,21,605	2,88,533	2.40	1,57,708	4,46,241	3.72	122 128	45.00
1903		•	•	•	•	•	•	•	•	:	1,19,72,911	5, 70,358	3,13,697	2.62	1,65,3 62	4,79,079	4.00		45.00
1901		•	•	•	•	•	•	•	•	•	1,19,77,154	5,55,199	3,05,360	2.55	1,72,721	4,78,081	3.99	188	45.00
1905	•	•	•	•	•	•	•	•	•	•	1,40,47,109	0,00,100	0,00,000	200	4)140.121	3,10,001	3.00	135	45'00
1906											1,19,74,947	١	See	note abov	e.				

<sup>4 (</sup>d) Tarkessur railway (5' 6" gauge)-

Details of construction-This railway, which connects Secraphuli, a station on the East Indian railway, with Tarkessur, is 22 23 miles long. Its construction was sanctioned in 1883 and it was opened in 1885.

History of railways constructed and in progress. [For Index see page 112.]

Main head 4

Number  $\frac{\text{main head 4}}{\overline{\text{Sub-heads }(a) \ to \ (d)}}$ . EAST INDIAN RAILWAY SYSTEM—concld.

4 (d) Tarkessur railway (5' 6" gauge)—concld.

Details of construction—conold.

\*\*Permanent-way.—The permanent-way consists of 74-lb. iron rails laid on Denham Olphorts' cast-iron plate sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.-The line is fonced throughout.

Curves .- The sharpest curve is of 2,700 feet radius.

Gradients.—The ruling gradient is I'in 500.

Terms of contracts-

The railway is worked under the following contracts:-

Contracts of-Sth September 1883 (between the Secretary of State and the Tarkessur Railway Company) for construction.

15th September 1887 (between the Secretary of State and the East Indian Railway Company) for working.

1st March 1888 (between the Secretary of State and the Tarkessur Railway Company) for working.

The general conditions of the contracts are as follows: -

Government aid .- Land was provided free of cost.

Currency of contracts .- The contract of 1883 terminates on the 7th September 1982; but the Secretary of State, by giving twelve months' previous notice, has the power to determine the contract after the railway has been opened for thirty years and thereafter at intervals of ten years. In the event of such determination Government will pay the Company a sum equal to the aggregate net profits during the twenty years preceding.

Power of Company to surrender contracts .- Nil.

Terms of working.—From the gross earnings are deducted working exponses (which may include capital expenditure classed as 'Minor Works' subject to a maximum charge on such account of Rs. 15 per mile of line open in each halfyear and a payment of Rs. 49 for every mile of line open to traffic to be made half-yearly to Government for supervision) calculated at the same percentage of the gross carnings as obtains on the East Indian railway system as a whole; 5 per cent, of the gross carnings for the hire of rolling-stock; and contribution to the Provident Fund. The balance is divided

in the proportion of four-fifths to the Tarkessur Railway Company and one-fifth to the East Indian Railway Company.

Rates and fares.—Certain maxima have been fixed, and the Company is authorized to charge within those

maxima such rates and fares as may from time to time be mutually agreed upon.

Statistics of working-

												TABLE 1.				Tabl	E II.
	• -			Ċ	Calen	dar y	onr.	•				Capital out- lay to end of each year.		Not earnings,	Per cent. on Capital outlay.	Farmings por mile per week.	Propertion of expenses to carnings
1885			•	•	,	•	•		•		•	Rs. 16,88,005	R4. 2,62,313	Rs. 1,21,121	7:37	R4. 227	52:57
1886 1887 1888 1889 1890	:	:	:	:	:	:	:	:	:	:	:	. 17,24,717 17,28,410 17,34,822 17,28,138 17,28,773	2,49,003 2,63,792 2,79,747 2,84,895 2,86,526	1,19,136 1,32,274 1,36,780 1,36,578 + 1,44,283	6:91 7:65 7:83 7:90 8:35	215 228 242 246 246	52:15 49:86 51:10 55:51 49:61
1891 1892 1893 1894 1895	: : : :	:	:	:	:	:	:	:	:	:	:	. 17,29,031 17,32,567 17,47,280 17,47,840 17,50,340	3,05,192 2,93,674 2,83,051 3,06,159 2,08,156	1,63,478 1,54,537 1,50,420 1,56,469 1,59,901	9:45 8:94 8:61 8:95 9:07	264 254 245 265 267	46:42 47:28 46:86 48:06 48:37
1896 1897 1898 1899 1900	:	:	:	:	:	:	:	:	:	:	:	17,56,898 17,57,160 17,77,095 17,84,166	3,12,656 3,14,056 3,05,759	1,57,005 1,62,563 1,59,461 1,52,491 1,61,132	8 95 9 25 8 92 8 55 9 03	271 270 272 267 288	49 88 48 01 49 54 50 58 51 61
1901 1902 1903 1904 1905	:	*	:	:	:	:	:	:	:	:	:	. 17,92,093 17,91,612 17,93,985 17,97,555 17,98,616	3,28,510 8,33,924 3,30,635	1,57,928 1,50,348 1,63,741 1,63,006 1,55,291	8:81 8:56 9:13 9:67 8:63	285 283 288 284 282	2·23 53·32 50·96 50·76 52·49
1006												. 17,99,166	3,51,888	1,58,989	8 84	304	54.82

Number Main head 5 Sub-heads (a) to (b). GREAT INDIAN PENINSULA RAILWAY SYSTEM—

Chairman .- Rt. Hon'ble Sir Andrew R. Scoble, K.C.S.I. Managing Director.-Colonel F. Firebrace, R.E.

Offices .- 48, Copthall Avenue, E. C., London.

Lines comprising the system. The Great Indian Peninsula railway system is made up of-

								Under construction	
							Open line.	or sanctioned for construction.	Total.
							Miles.	Miles.	Miles.
(a) Great Indian Peninsula railway	(5' 6" gauge)						1,561 63	45.78	1.607.41
(b) Agra-Delhi Chord railway	(5' 6' gauge)	•					125-99	•••	125 93
(c) Bhopal-Itarsi railway	(5' 6" gauge)						57:39	***	57:89
(d) Bhopal-Ujjain railway	(5' 6" guage)						113 27	•••	113.57
(e) Bing-Goods-Baran railway	(5' 6" gauge)						145.63	•••	145.63
(f) Indian Midland railway	(5' 6" gauge)						809-85	***	809 85
(g) Gwalior Light railway	(2' 0" gauge)	٠.					183:53	66'39	219 92
(h) Matheran Light railway	(2' 0" gauge)	•	٠				•••	12.61	12.61
- 1 · 1 · 1								-	
				Tot	al	٠	2,997-29	124.78	3,122-07

# History of railways constructed and in progress.

[For Index see page 112.]

ning powers—				
Home line over foreign lines:-				
Dadar junction to Coluba, Bombay, Baroda and Central India railway, for goods trains only				
At Agra, Rajputana-Mulwa railway, for pa-senger and goods trains At Campore, East Indian railway, 0.97 mile, for passenger trains and 0.52 mile for goods trai				•
At Campore, east indian initiary, "3" fittle, for pussenger trains and 0'52 mile for goods trains	na .			
At Manikpore, East Indian railway, for passenger and goods trains		•	•	•
At Katm, East Indian railway, for goods trains only At Kutm, Bengal-Narpur railway, for passenger trains only At Ujian, Bombuy, Baroda and Central India railway, for passenger and goods trains	• •	•	•	•
At Hijain, Bombay, Baroda and Central Indus radway, for passanger and goods trains	•	•	•	•
At Cawmore, Outh and Robilsband (State) railway for passanger and goods trains		•	•	•
At Cawnpore, Oudh and Rohilkhand (State) railway, for passoner and goods trains From Cawnpore to Inteknow, Oudh and Rohilkhand (State) railway, for passenger and goods to		•	•	•
e and a second s	Lains	•	•	•
		T	otal	
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•

Bombay, Barola and Central India railway. Dadar Junction to Carnao brulgo, for goods trains only Bongal-Nagpur railway at Nagpur for Passonger and goods trains

5 (a) Great Indian Peninsula railway proper (5' 6" gauge) —
This line was purchased by the State in 1900, but the working was left in the hands of the Company under the terms of a new Contract, dated the 21st December 1909.

0.62

Details of construction -

The open mileage of the Great Indian Peninsula railway proper is 1,561 63 miles. This may be divided into North-East line, main line (Bombay to Jubbulp re), 615 10 miles; brauches, 384 99 miles: (2) South-East line, main line (Kalyan to Raichur), 408 86 miles; branches, 152 68 miles. Of the above 567 48 miles are double and 4 92 miles quadruple line.

There are under construction 45 78 miles of single line.

First sanction to the construction of the North-East line was given in 1850 and it was opened throughout in 1870.

The South-East line was sanctioned in 1851 and it was opened throughout in 1871.

Permanent-way .- The main line is laid with 86-lb. double-headed, 82-lb. bull-headed and 69-lb. double-headed steel rails. The sleepers originally laid were chiefly wooden; these have now to a large extent been replaced by iron pots. The whole of the South-East line, except the ghat sections, is laid with non pots.

Ballast.—The line is fully ballasted throughout with sand gravel or broken stone.

Fencing.—With the exception of the Mohpani, Chaligaon-Dhulia, and Jalgaon-Amalner branches the line is fully fenced.

Curves.—The sharpest curve has a radius of 990 feet.

Gradients.—The ruling gradients on ordinary sections of the main line vary from 1 in 100 to 1 in 200, with 1 in 100 banking sections near Vasind and Asvali; the ruling gradient on the ghat sections is 1 in 37. Terms of contract-

The railway is worked under the following contract:—

Contract of -21st December 1900 for working the Great Indian Peninsula railway and Indian Midland railway systems as one undertaking.

The general conditions of the contract are as follows :--

Government aid.—Government to pay interest at 3 per cent, per annum on the amount for the time being paid up, or credited as paid up, on the shares or stock in the new capital of the Great Indian Peninsula Railway Company, which is at present authorised at £2,575,000. All capital will be provided by the Se retury of State bearing interest at the rate of 3½ per cent. per annum, or at such other rate as may be agreed upon; or will be raised by the Company, by the issue of debentures or debenture stock, at such rate of interest as the Secretary of State may determine. Land was provided froe; but any land acquired after 30th June 1900 is paid for from the capital of the undertaking.

Terms of contract.—The line was purchased from the Great Indian Peninsula Guaranteed Railway Company by

the State in 1900, when all the contracts then subsisting between the Secretary of State and that Company were determined. The purchase £ . 34,859,218 Company's stock at date of purchase . Debentures and debenture stock . Secretary of State and that Company were determined. . 5,922,359 price was £40,781,568,\* payable, up to the 17th August 1949, in the form of a terminable annuity of £1,268,516. Total . 40,781,568

Currency of contract.—The contract is current for a period of 25 years from the 1st July 1900, when it will be determinable by the Secretary of State, paying the amounts paid or credited on all shares and stock and indemnifying the Company from all debts and liabilities incurred under sanction.

Power of Company to surrender contract—Nil.

Terms of working .- From the gross earnings of the undertaking, that is of the Great Indian Peninsula and Indian Midland railways, there will be deducted-

(i) The working expenses, which may include any single item of capital expenditure not exceeding Rs. 2,000 to be classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 per mean mile worked to be made half-yearly to Government for supervision;

(ii) A sum of Rs. 1,00,00,000 which is payable to Government;
(iii) Repayment of all interest payable on all moneys other than shares or capital stock raised for the purposes of the undertaking or provided by Government after the 30th June 1900.

If the receipts for any year ending on the 30th day of June exceed the payments as above detailed for the same period, 18ths of the surplus are paid to the Secretary of State and 10th to the Company; provided that if the Company increases its new capital and issues further shares or stock as fully paid up in exchange for stock of the Indian Midland Railway Company, the Company's share in such surplus shall be increased by an additional fractional share bearing the same proportion to the original fractional share of  $\pi_0^1$ th as the additional capital of the Company so exchanged bears to the new authorised capital of £2,575,000, but the total fractional share of the Company is not to exceed a one-tenth

Rates and fures .- Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

History of railways constructed and in progress.
, [For Index see page 112.]

Number  $\frac{M_{ain \ boad \ 5}}{Sub-boads \ (a) \ to \ (b)}$ . GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (a) Great Indian Peninsula railway proper (5' 6" gauge)—contd.

Statistics of working-

			Тант	.в I.		١.			TAB	LK II.	
Calendar year.	Capital cutley to end of each year.	Gross Carnings,	Not earnings.	Per- centage on capital outlay.	Guaran- teed interest.	Annuity.	Com- pany's share of net earnings.*	Qain or loss to the State.	Calend <b>ur year</b> .	Farn- ings per mile per week.	Pro: of exp: to esrn- ings.
1879	R∢. 25,59,56,152	Rs. 2,52,18,315	Ra. 1,01,90.602	3:98	Ra. 1,24,45,846	Rs	Rs. 6,34,091	Rs. 28,89,335	1079	Rs.	45.00
1880	25,58,96,113	2,49,53,250	1,11,65,551	4:4	1,21,93,200		5,50,406	19,41,485	1853	119 68 69 113	45.90 60.81 70.21 42.17
1881	25,75,86,095	3,20,56,823	1,61,71,097	6.3<	1,21,92,200	70	18,23,748	- 18,57,119			45.27
883	25,75 90,499	3,53,63,201	1.80,88,453	7:02	1,24,93,200		32,05,883	+ 23,89,109	1857 1858 1859 1860	158 173 172 144	42-19 51-19 60-97
883	26,07,18,700	3,51,14,365	1,75,36,005	6.72	1,25,12,825		33,22,918	+ 17,00,262	1861	130	76.35
881	26.31,97,600	3,26,56,511	1,50,55,250	6.08	1,42,91,503		21,76,043	-8,02,301	1862 1863	149 175 119	62.62 67.55 72.07
885	26,81,47,316	3,64,32,017	1,79,31,397	6.68	1,51,17,467		26,07,344	+ 1,16,586	1865 . ,	414	59 54
886	26,92,99,673	8,92,57,907	2,08,78,390	7:75	1,60,91,188		59,59,569	+ 7,97,683	1566	357 368 357	58.07 55.69 61.80
887	27,03,76,513	3,99,27,468	2,10,80,2.7	7 80	1,66,44,563		41,03,008	+ 3,32,601	1869	318	67-78
889	27,25,93,061	4,16,59,219	2,16,35,667	7.91	1,72,81,176		43,31,246	+ 2:1,245	1870 1871 1872	800 807 284	63.96 63.96
889	27,50,39.981	3,70,68,814	1,78,91,616	6 51	1,74,32,160		26,82,355	-22,22,799	1873	281	64.0
800	27,77,29,061	3,81,45,242	1,90,22,952	6 85	1,55,23,271		31,04,971	+ 3,94,710	1874 1875 1876	303 324 369	59·1° 47·20 47·60
891	27,75,19,781	4,52,55,833	2,32,50,703	8:08	1,67,57,263		51,50,003	+ 10,04,408	1877	492	48.3
892	27,72,17,255	4,03,65,627	2,01,95,097	7:28	1,58,03,013	•••	38,13,506	-21,22,723	1877 1878 1879 1860	429 383 872	48°9 48°9 55°4
893	27,72,93,860	3,88,13,742	1,79,90,922	6.19	1,91,65,618		20,21,476	-41,00,172	1881	426	49.4
894	27,91,09,112	3,62,71,296	1,62,42,786	5.82	2,18,32,651		30,10,331	- 86,30,196	1892 1883		48.0 48.6 53.3
895	27, <b>9</b> 5,39,235	3,37,90,191	1,17,16,901	5:26	2,16,97,060	•••	16,20,061	-8c,00,520	1886	467 563	50·4 46·4
896	27,90,29,173	3,44,19,629	1,54,05,000	5 52	2,02,18,572		21,53,257	69,67,063	1887	511 526	46.8
1807	27,92,85,611	2,81,32,103	93,83,654	3.36	1,89,46,179		ı	- 95,62,825	1889 1890	494 508	51·4 49·8
898	28,19,37,621	3,49,77,406	1,41,02,053	5.00	1,83,20,513	•••	10,57,327	-50,75,787	1591	584 525	48 2 49 9
899	28,55,49,756	3,58,09,131	1,56,57,520	5:48	1,79,65,941		17,77,002	40,85,156	1.91	£01 468	53·8 55·1
$1900$ { let half }	30,27,49,717	3,46,31,925	\$ 95,37,180 \$ 66,30,083		89,65,500 21,31,267	63,88,880	14.48,203	- 8,76,570 52,93,670	1895 : : 1896 : :	476	56.8
1901	80,38,67,185	4,16,57,453	2,16,48,151	7-12	48,00,008	1,90,87,970	2,72,210	26,08,937	1899	367 450 462	66°9 59°4 53°7
1902	30,57,71,091	4,23,12,668	2,10,73,893	6.80	49,41,692	1,90,56,785	2,92,872	02,17,454	1900	439	52.4
1903	31,08,58,055	1,68,61,554	2,38,12,514	7-66	50,66,786	1,90,28,730	3,26,578	0,09,880		518 523 575	48*( 50*) 49*)
1904	32,00,72,108	4,82,41,344	i	1	53,09,707	1,90,28,730	2,01,513	-4,50,352	1904	192	49.8
1905	89,65,20,022	1	2,70,20,162 2,53,01,900		57,59,480 61,20,668	1,90,28,780 1,90,28,730	4,63,700 4,70,548	+17,68,213	1	611	49
1906	33,57,64,972	5,05,28,479	1 200,01,000		1,=0,000		the year.		1		1 20

<sup>·</sup> Based on actual receipts and payments during the year.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 5 Sub-heads (a) to (h). GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (a) Great Indian Peninsula railway proper (5' 6" gauge)—ceneld.

Statistics of working-concid.

	1 .		WARDH	A COA	L BRAN	CH.			DH	OND-M	ANMA	D BRA	NCII.		
			Тапі,	Ι.		•	TABLE 11.		,	Тавь	г I.			TABI	E II.
, Calendar year.	Capital outlay to end of cach year.	Gross carn- ings.	Net carnings.	Per cent, on cape- tal out- lay,	in- torest.	Gain or loss to the State	Eirn-Promings of exp mile to por eara- week.	Capital outlay to end of each year.	Grota minutes,	Not carn- ings.	Per ceut. on capital out-	In- torest.	Gain or loss to the State.	Earn- ings per mile per week.	of * exp: to earn-
1879 4 . 1880	Rs. 55,99,772 57,32,921 58,80,993 60,94,186 63,93,758	0,02,879 4,75,988 5,95,622	Rs. 6,073 -1,31,730 1,19,447 98,257 5,82,382	2 (3	2,57,032		65 152:9 197 104 3 255 76:80	Rs. (198,90,308 (1,07,29,227 (9) (9,746 (1,00,64,757	6,95,094 6,35,862 7, 9,555	1,22,588	0°61 1°23 1°66	3,93,138 3,93,138 3,97,802	Rs. 1,35 189 4,11,154 2,70,850 2,78,670 2,10,446	91 *	105·02 87·31 * 76·65
1584 1885 1856 1887	66,20,641 66,65,755 71,93,093 71,90,635 70,91, <b>2</b> 30	6,13,649 7,18,205 7,68,052	2,11,860 1,16,395 1,35,936 1,31,981 1,98,920	2 20 1 0 1 -6	2,61,176 2,61,219 2,61,226 2,89,166 2,84,528	-1,17,924 -1,12,293	108 85 66 114 92 26 125 80 7	(1,02,49,438 (1,02,63,258 (1,00,36,745 (1,00,46,955 (1,60,75,115	9,07,423 9,54 718 9,60 390	2,53,744 2,27,538	2·15 2·14 2·08	4,10 514   4,3 4,353   4,37,893	- 2,04,498 1,89,921 1,96,.89 2 10,555 1,83,018		76 <sup>.</sup> 77
1889 1890 1891 1892	70,54,755 70,06,181 49,81,196 49,67,689 49,47,639	9,30,326, 2,58,971 2,32,353	2,99,621 2,77,901 00,053 31,096 80,21a	3 93 1/21 0 68	1,79,347	+ 16,777 - 6,295 -1,43,726 -1,65,211 -2,19,71	119 63 61	1,09 88,850 1,09 93,445 1 10,44,639 1,12,73,025 1,11,37,125	12.18,113	2,50,134 5,05,553 3,58,305	2:39 2:79 2:96	1,39,629 1,40,296	-1,89,592 -1,76,495 -1,31,713 -1,14,200 -95,674	;; 	<b>.</b>
1894 1895 1896 1897	49,87,689 49,90,794 49,96,305 49,96,325 49,96,325	1,93,552 2,06,078 1,98,855	89,989 76,362 83,550 63,531 77,827	1.53 1.68 1.17	1,99,539 1,99,745 1,99,791	-1,10,219 -1,23,177 -1,15,886 -1,17,263 -1,12,026		1.12.11,642 $1.13.18,247$ $1.13.73,050$ $1,14,06,534$ $1,14,23,076$	11 04 021 13.1185 12,01,143	4,05,232 3,67,395 2,31,272	3·61 3·23 2·17	4,48,019 4,50,104 4,55,018 4,56,230 4,56,411	-87.623 -1.74.958		
1899	49,96,325 } • Amalgama	1,75,380		}{	99,927	1,17,25° 19,173 suls radw	}	*	11,55,032 7,25,613 { ited with	2,11,531	}{	2.30,550		}	

							KUA	MGAON 1	BRANCH				Λ.	MRAOTI 1	BRANCH.		
							TABL	е Т.		Таві	E II.		Capital outlay to end of cartings.  Carungs.  Carnings.  P. r cont. On outlay on outlay.  Pur well than the carnings.				II.
		Cale ye		•		Capital outly to end of each your.	Gross carmigs,	Net enraings.	Por cent, on capital outlay.	Earn- ings por mile per week.	Pro: ot exp: to earn- ings.	outlay to end of each		Net	on oupital	Earnings por mile per week.	Pro : of exp : to ournings.
1979 1680 1881 1882		:	:			178. 5,35,617 5,19,888 4,99,271 4,91,164 4,90,996	Ra 38,686 27,363 41,506 75,966 62,657	Re. -266 4,922 4,561 30,389 22,469	0.94 0.92 6.19 4.58	Rs 146 91 * * 151	100°69 81°44 * 61°14	4,77,043 4,45,585 4,45,663 4,44,651	69,904 50,866 53,931 85,147	16,175 3,689 84,124 39,535	0°82 7°72 8°89	Rs. 224 163	76:86 92:85
884 885 886 1887		:	:	:	•	4,90,903 4,90,739 4,89,613 4,89,180 4,88,357	46,830 41,363 59,452 53,479 52,635	13,037 11,020 20,233 16,990 15,797	2 66 2 25 4 13 3 17 8 23	113   	72·16   	4,11,774 4,14,730 4,14,686 4,14,308 4,13,892	76,782 60,803 95,111 88,157 81,710	34,174 34,447 44,137 35,855 30,886	7:68 7:75 9:93 8:07 6:96	246  	55:46  
1889 1890 1891 1892 1893		:	:	:	•	4,90,911 4,90,520 4,90,408 4,89,132 4,87,567	65,372 55,288 66,675 65,548 21,697	22,528 26,092 32,620 30,909 21,997	4·59 5·32 6·65 6·32 4·51	  	::	4,45,615 4,45,155 4,49,395 4,50,160 4,49,998	1,02,023 1,01,502 1,12,900 1,05,762 48,941	41,671 46,254 53,398 48,637 43,056	9:35 10:39 11:88 10:80 9:57	 	
1894 1895 1896 1897 1898		:	:	:	·:	4,86,003 5,20,947 5,22,603 5,22,150 5,22,150	21,966 26,091 24,446 13,901 24,326	21,667 26,031 24,446 18,901 24,326	4:46 5:00 4:65 2:66 4:66	  		4,49,461 4,19,988 4,51,119 4,52,415 4,54,498	42,795 39,137 43,756 30,746 40,057	41,910 88,253 42,871 29,862 39,172	,9:32 8:50 9:50 6:60 8:62		400 070 7 000 431
1999 1900 1901 1902		t hal	: {;}	:	:	5,22,150 5,22,150 5,22,150	41,850 33,783 49,378 { 32,968	14,850 18,924 28,337 17,209	}	 120 120	 52.71 52.35	4,54,417 4,54,418 4,51,915	33,099 78,532 1,08,578 79,588	32,214 32,486 50,837 41,099	7·09 7·14 11·12 }	 865 488	\$8*78 53*86
1903	•	•	•	•	•	Amalgama	ted with	he Great I	Indian P	eninsula	railway.	Amalgama	ted with the	Great In	dian Penin	eula railw	ay.

# History of railways Constructed and in progress. [For Index see page 112.]

Number Main head 5 (a) to (b). GREAT INDIAN PENINSULA BAILWAY SYSTEM—contd.

5 (b) Agra-Delhi Chord gailway (5' 6" gauge)-

This railway has been constructed by the State and is worked by the Great Indian Peninsula Railway Company. Details of construction—

This railway is 125.99 miles long. Its construction was sanctioned in 1898 and it was opened in 1904.

Permanent-way.—The line is laid with 85-lb. bull-headed steel rails on 45-lb. cast iron chairs spiked with 3 spikes to deodar sleepers.

Ballast.—The line is ballasted with kunkur soling and stone ballast to bring it up to full section.

Fencing .- The Kosi-Delhi section is fenced and the Agra-Kosi section is being fenced.

Curves. The sharpest curve is of 950 feet radius.

Gradients.—The ruling gradient is 1 in 400, except between Raja Ki Mandi Junction and Agra Jail and between Delhi Sadr and Delhi Junction where it is 1 in 200 and 1 in 333, respectively.

Terms of contract-

This railway is being worked under a contract (between the Scoretary of State and the Great Indian Peninsula Railway Company) which is under execution and which is to be deemed to have commenced on and from the day on which the Agra-Delhi Chord railway was opened for public traffic.

The general conditions of the contract are as follows:— Government aid.—The line is the property of the State.

Currency of contract.—The contract may during its subsistence be terminated on the 30th June or 31st December either by the Secretary of State or the Company giving to the other party not less than twelve calendar months' notice in writing.

Terms of working.—The charge for working expenses of the Agra-Delhi Chord railway bears the same proportion to its gross earnings as the entire working expenses of the Great Indian Peninsula railway "undertaking" including the Agra-Delhi chord railway bear to their combined gross earnings.

The whole of the net earnings belong to Government.

Rates and fares .- The same as are in ferce on the Great Indian Peninsula railway undertaking.

Statistics of working-

,			TABLE	I.			TAR	DLE II.
Calendar year.	Capital outlay to end of such year.	Gross osrnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of ex- penses to essnings.
1904 · · · ·	Rs. 1,05,91,000 1,22,46,927 1,27,90,307	Rs. 18,070 8,04,654 16,46,320	Rs. 9,992 4,19,625 8,15,363	0·09 3·43 6·37	Rs. 2,95,164 4,20,181 4,70,283	Bs2,85,172 -556 +3,45,080	Rs. 43 140 253	44-71 47,85 50-47

## 5 (c) Bhopal-Itarsi railway (5' 6" gauge)-

#### Details of construction-

This railway is 57:39 miles long. Its construction was sanctioned in 1890 and it was opened in 1884.

Permanent-way.—The line is laid with the Indian Midland railway 80 lb. flat-footed steel rails on Indian Midland railway cast iron pot sleepers.

Ballast.—The line is fully ballasted throughout with broken stone.

Fencing .- The line is fenced throughout.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients .- The ruling gradient is 1 in 200, except on the Ghat section, 11 miles, where it is 1 in 80.

#### Terms of contracts-

The Bhopal-Itarsi railway is worked under the following :-

Agreement of -16th September 1880 (between the Government of India and Her Highness the Begum of Bhopal) for construction.

2nd December 1890, supplemental to that of 1880, for division of profits.

Contract of -21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working by the Great Indian Peninsula Railway Company.

The general conditions of the contracts are as follows:-

Government aid.—The British Government have paid for the portion, 13:11 miles, in British territory, and a moiety of the cost of the bridge over the Nerbudda, or in all about 13 lakhs; the Begum of Bhopal has contributed 50 lakhs for the portion of the line in her dominions. All additional capital has to be provided by Government.

Currency of contracts.—The provisions in the principal contract between the Secretary of State and the Railway Company itself with reference to the termination of that contract extend, and are applicable, to the Bhopal-Itarsi railway.

Power of Company to surrender contracts .- Nil.

The Company receives a sum bearing the same percentage to the gross receipts of the Bhopal-Itarsi railway as the aggregate working expenses of the whole open system of the Company (including the Bhopal-Itarsi railway) bear to the aggregate gross receipts of that system. The balance of the gross receipts are divided in perpetuity where the British Government and the Ruler of Bhopal in proportion to the capital contributed by each party. In the award of the railway being worked at a loss, such loss to be borne in the same proportion.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 5 GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (c) Bhopal-Itarsi railway (5' 6" gauge)—concld.

Terms of contracts-cancld.

Rates and fares .- The same rates and fares as are in force on the Great Indian Peninsula railway.

#### Statistics of working-

							TABLE	T.							TABI	E II.	
					Buopal-In	rausi (Bri	rish sec	TION).		BHOPAT,	-ITARSI (	NATIVE ION).	STATE	British :	ection.	Native	
Cale	ndar J	ear.		Capital outlay to end of each year,	Gross earnings.	Net earnings.	Per cent, on capital outlay.	In- torest,	Gain or loss to the State.	Capital outlay to end of each year.	Gross caru- ings.	Net earn- ings.	Per cent. on capital outlay.	Earn- ings por mile per week,	Proportion of expenses to earnings.	Earn- ings per mile por week.	Proportion of expenses to earnings.
1880.				Rs.	Rs.	Rs.	1	Re.	Rs.	Rs. 1,21,816	Rs.	Rs.		Rs.		Rs.	
1881 . 1882 .	:	:	:	12,50,000	 14,376	2,701	0.08	50,000	-17,296	15,78,157 34,60 091	11,376	2,704	0.08	 <sub>70</sub>			
1883 . 1884 .	:	:	:	12,50,000 12,50,000	25,573 7,664	9,135 -1,106	•	50,000 50,000		38,23,236	25,573 28,102	-9,135 -5,152		43 40	81·90 135·72 104·13		ded with
1885. 1886.	•			12,50,000 12,50,000	27,125 27,622	-3,871 -3,210		50,000	-53,874 -53,210	47,71,375 48,26,036		~14,789		Include	d with	Great	Indian
1887 . 1888 .	:		•	12,50,000 12,50,000	49,227 55,117	3,950 5,340	0.31 0.13	50,000	16,150 14,660	48,09,939	1,85,576		0·31 0·38	Ponin	sula rail	way.	Inquan
1869 .	:		:	12,50,000	79 163	-5,122			- 55,122			-18,351		117	106.85	117	106.85
1890 . 1891 .				12,85,077 15,13,568	87,765 1,30,881	-16,572 18,607	3 21	50,351 57,713	- 66,923 - 9,106	50,00,000		56,093 1.73,154	3:46	130 200	118:88 62:50	130 199	118.88
1892 .	:	7	:	17,16,208 20,25,058	1,53,099	56,397 52,038	2.57	69,131 78,129	-12,731 -26,591	50,00,000	1,47,797	1,65,988	3·32 2·62	226	63.16	195	62 50 62 96
1893 . 1894 .	:	:	:	21,71,496	1,61,638	61,155	2 83	83,509	2: 054		3,80,217	1,11,607	2.89	248 237	69 17 61:98	185 166	69·17
1895 .				22,47,963	1,42,658	46.114 62.744	2.05 2.76	89,333 90,107	- 13,209	50,00,000	3.18,074	1,02,821	2.06	209	67:68	138	67:64
1896 . 1897 .		:		22,71,877 22,97,134	1,63,688 1,52,215	61,135	2.66	91,805	- 30,670		3,31,379	1,33,096	2·77 2·66	241 223	61·75 59·84	157 144	61.63 59.84
1898 . 1899 .		:	:	23,24,365 23,61,938	1,93,364 2,09,611	79,135 84,080	3·42 3·56	92,177 93,363	13,042		1,17,010 1,47,225	1,71,372 1,79,114	3 13 3 59	284 307	58·81 59·89	181 194	59.8 <b>8</b>
1900 .				23,67,389	2,55,120	1,27,332	5 33		32,039	50,00,000	5,35,069	2,67,288	5'35	375	56-12	234	50.06
1901 . 1902 .		:	:	25,46,891 28,02,330	2,92,861 3,46,103	1,44,235 1,71,236		1,06,632	1 64,604	50,00,000 50,00,000	6.37,038	3.16,683	5·77 6·83	430 508	50·75 51·51	251 278	50.64 49.74
1903 . 1904 .		:	:	30,92,697 31,52,907	3,77,177	1,91,143		1,17,295 1,20 127	+74,118	50,00,000	6,31,911 6,43,742	3,21,328 3,23a374	6.12 6.12	553 583	49·48 50·14	276 279	48.81 49.81
1905 .				31.76.930	3 25,637	1,67,305		1,23,241	+ 44,064		5,21,619	2,67,959		477	48.57	227	48.63
1906 .	•	٠	•	32.57.271	3,61,617	1.78,761	5.40	1,25,079	+ 53,682	50,00,000	5.65,510 	2,81.376	5 63	581	50.57	246	50-25

## 5 (d) Bhopal-Ujjain railway (5' 6" gauge)-

# Details of construction-

This railway is 118:27 miles long. Its construction was sanctioned in 1892 and it was opened in 1895.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on transverse steel sleepers.

Ballast .- The line is fully ballasted throughout with broken stone.

Fencing .- The line is fenced only at, and in the vicinity of, stations, towns and important level crossings.

Curves.-There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 150.

## Terms of contracts-

The railway is worked under the following:-

Agreement of—4th August 1896 (between the Government of Her Highness the Begum of Bhopal and the Indian Midlaud Railway Company) for working the Bhopal-Parbati section.

4th August 1896 (between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working the Parbati-Ujjain section.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for working by the Great Indian Peninsula Railway Company.

The general conditions are as follows :--

Government aid.—Nil. The Bhopal-Parbati section is owned by the Bhopal Durbar and the Parbati-Ujjain section, by the Gwalior Durbar.

Currency of agreements.—The agreements are terminable on the expiry of ten years from the dates of the opening of the sections or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party.

Terms of working.—For the Bhopal-Parbati section the Company retains out of the gross receipts a sum bearing the same proportion to the whole of the working expenses attributed to the Indian Midland railway system including branches as the gross receipts of the section bear to the whole gross receipts of that system including branches.

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head } 5}{\text{Sub-heads } (a) \text{ to } (b)}$ . GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (d) Bhopal-Ujjain railway (5' 6" gauge)-concld.

Terms of contracts-concld.

For the Parbati-Ujjain section the Company retains 50 per cent. of the gross receipts of the section of each halfyear; and receives reut for works, &c., in sole and joint use at Ujjain Junction and rent for the telegraph lines and instruments when not the property of the railway.

Rates and fares .- The same rates and fares as are in force from time to time on the Great Indian Peninsula railway. Statistics of working-

											TABLE	Ι.				Таві	æ П.
	<del></del>			Cale	ndar	year.					Captal outlay to end of each year.		Gross earnings.	Net earnings.	Per cent, on capital outlay.	Earnings per mile per week.	'Pro: of exp: to earnings.
										-	Rs.	-	Rs.	Řs.		Ra.	
1892											88,462	1				****	
1803	•	•	•	•	•	•	•	•		:	22,76,863	1					1
1894	•	•	٠	•	•	·	•			-	53,53,819	1	•••				
1895	•	:	:	:	:	Ċ	·				60,69,331		1,958	979	0.01		50.00
1896 1897 1898 1899 1900 1901 1902 1903 1904				:		:		: : : : : : : : : : : : : : : : : : : :	•	: : : : : : : : : : : : : : : : : : : :	77,77,604 75,36,180 75,85,789 76,84,290 76,85,020 77,61,569 78,02,855 78,11,402 78,14,670		4,54,721	1,80,218 1,84,660 2,05,051 2,77,911 4,65,651 2,62,044 2,77,292 2,14,441 2,17,562	2:32 2:45 2:45 2:70 6:06 3:38 3:75 2:86 2:91	63 63 71 99 161 93 99 76 77	51·17 50·40 50·82 52·28 50·79 52·00 52·36 49·85
905	:	:	:		:	·	÷			·	78,35,712		6,08,240	2,96,639	3.91	103	5128
1906							٠.				78,51,048		6,86,799	3,31,924	4:23	117	51.67

# 5 (e) Bina-Goona-Baran railway (5' 6" gauge)-

Details of construction-

This railway is 145.63 miles long. Its construction was sanctioned in 1892 and it was opened in 1899.

Permanent-way.—The line is laid with 75-lb. flat-footed steel rails on deodar sleepers.

Ballast .- The line is ballasted with broken stone and laterite.

Fencing.—The line from Bina to Goona is fenced. The Goona-Baran section is unfenced except at stations.

Curves .- There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 125.

#### Terms of contracts .-

The railway is worked under the following :-

Agreements of-15th July 1896 (between the Government of His Highness the Maharajah Scindia of Gwalior and the Indian Midland Railway Company) for working the Bina-Goona section.

12th May 1899 (between the Government of His Highness the Maharajah Scindia of Gwalior and the Indian Midland Railway Company) for working the Goona-Dharnaoda section.

27th February 1899 (between the Government of His Highness the Nawab of Tonk and the Indian

Midland Railway Company) for working the Dharnaoda-Chabra section.

20th February 1899 (between the Government of His Highness the Maharao of Kotah and the Indian Midland Railway Company) for working the Chabra-Baran section.

Contract of 21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for working by the Great Indian Peninsula Railway Company.

Agreement of-16th March 1905 (between the Tonk and Gwalior Durbars) for purchase by the latter of the Dharnaoda-Chabra section.

The general conditions are as follows :-

Government aid-Nil. The Bina-Goona, Goona-Dharnaoda and Dharnaoda-Chabra sections are owned by the Gwalior Durbar, and the Chabra-Baran section by the Kotah Durbar.

Currency of agreements. - The agreements are terminable on the expiry of ten years from the dates of the opening of the sections, or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party.

Terms of working .- For the Bina Goona section the Company retains 50 per cent. of the gross receipts of the section of each half-year; and receives rent for works, etc., in sole and joint use at Bina junction, and rent for telegraph lines and instruments when not the property of the railway.

For the Goona-Dharnaoda, Dharnaoda-Chabra and Chabra Baran sections the Company retains out of the gross receipts a sum (which includes any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile open in each half-year) bearing the same proportion to the whole of the working expenses attributed to the Indian Midland railway system as the gross receipts of each section bear to the whole gross receipts of that system. This sum not to exceed 50 per cent. of the gross receipts in the case of the Goona-Dharnaoda section.

Rates and fares. - The same rates and fares as are in force from time to time on the Great Indian Peninsula railway.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Sab-heads (a) to (h). GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (e) Bina-Goona-Baran railway (5' 6" gauge)—concld.

Statistics of working-

<b></b>											TABLE I.				TABI	E II.
		Calendar year.							Capital outlay to end of each year.	Gross carnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp		
91											R4.	Rs.	Ka.		Rs.	
92	•	•	•	•	•	•	•	•	•	•	51,905		***	·		•
98	•	•	•	•	•	•	•	•	•	•	2,57,611		•••		•••	***
94	•	•	•	•	•	•	•	•	•	•	35,18,701			1 1	•••	•••
22	•	•	•	•	•	•	•	•	•		47,79,618	1	•••			***
95	•	•	•	•	•	•	•	•	•	•	47,81,035	48,701	22,198	:::	i9	••• 54·
16		•	•	•	•	•					51,16,074	91,140	36,821	0.00		
7		•									87,73,621	1,02,386	48,446	0.68	24	59.
8				•							97,66,068	1,30,001	50.010	0 50	27	57.
9									-	- 1	99,31,680	2,67,359		0 59	35	55
Ю									- :	i i	1,00,21,605	4,31,817	1,26,108	1.27	48 i	52
1								•	•	• !		1	2,20,490	2.50	57	49
	•	•	•	•	•	•	•	•		. !	1,00,13,236	2,52,716	1,22,970	1.22		
2	•	•	•	•	•	•	•	•		• j	99,14,442	2,38,825	1,19,792	1.21	33	51.
3	•	•	•		•					• :	99,62,459	3,21,585	1,55,600		32	52
4			•.							1	99,87,016	3.91,886	1,92,897	1 63	42	49
ō										. 1	99,90,394	3,68,669	1,81,269	1.98	52	49
												17,017,000	1,01,200	1.88	49	50
8										.	99,94,053	4,9),611	0.40.001			
		-	-	-		•	•	•	•	٠,١	20,09,000	2,57,011	2,40,881	2.41	65	50

5 (f) Indian Midland railway (5' 6" gauge)-

Chairman .- Rt. Hon'ble Sir Andrew R. Scoble, K.C.S.I.

Secretary .- R. H. Walpole, Esq.

Offices .- 48, Copthall Avenue, London, E.C.

#### Details of construction-

The open mileage of the Indian Midland railway is 809.85 miles, which may be divided into main line (Bhopal to Agra Read), 318.59 miles, and branches, 491.26 miles.

Sanction was first given to the construction of this line in 1876 and the main line was opened throughout in 1889.

Permanent-way.—The whole of the main line, the Manikpur branch the Cawnpore branch from Jhansi to mile 326.64, and from Bina to Katni, are laid with 80-lb. flat-footed steel rails on east iron pot sleepers. The Cawnpore branch from mile 331.64 to Hamirpur Road is laid with East Indian railway 75-lb. double-headed steel rails on Denham Olpherts' sleepers. The East Indian railway type rails and Denham Olpherts' sleepers are being gradually renewed with Indian Midland railway 80-lb. flat-footed steel rails and east iron oval pots.

Ballast .- The line is ballasted with gravel, laterite, kunkur or stone.

Fencing .- The main line is fenced throughout and the branches are partially fenced.

Curves .- There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient between Bhopal and Jhansi is 1 in 200; between Jhansi and Agra 1 in 150 and between Jhansi and Manikpur 1 in 125. The Jhansi-Cawnpore branch is practically level, except at bridge approaches where the gradients are 1 in 250 and 1 in 300, and between Jhansi and Garhmau where it is 1 in 200.

The railway is worked under the following contracts:-

Contracts of -2nd October 1885-Indian Midland Railway Company's principal contract.

18th March 1890—Contract for the acquisition of the Scindia railway.

13th June 1896-Contract for the Sauger-Katni railway.

21st December 1900—Contract for the transfer of the working of the Indian Midland railway to the Great Indian Peninsula Railway Company.

Government aid.—Interest at 4 per cent. per annum in sterling is guaranteed on £3,000,000 share capital. On further capital that may be required the guarantee to be 4 per cent. or such other rate as may be agreed upon. A considerable amount of capital has been advanced by Government for the existing system; and, in the case of the Saugor-Katni extension, it has been agreed that all money required for expenditure in India shall be supplied by the Government, the Company raising only the amount required for expenditure in England. Land was provided free.

Currency of contracts—(1) Indian Midland railway contract.—The contract of 1885 may be determined by Government giving 12 months' previous notice on the 31st December 1910, or on the 31st December of any succeeding tenth yeartions, or if the line be worked at a loss for not less than three consecutive half-years. On the termination of the contract the Company is to hand over to Government the railway and all its belongings of every description, and Government are to repay the, amount at par of the share capital which has been paid by the Company. The contract of 1900 is current for a on share capital and one-fourth share of surplus profits remains in full force till the termination of either the contract of 1900.

(2) Scindia and Sangor-Katni railways contracts.—The contracts of 1890 and 1896 run concurrently with that of 1885, to which they are supplemental,

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 5 Sub-heads (a) to (h). GREAT INDIAN PENINSULA BAILWAY SYSTEM—contd.

5 (f) Indian Midland railway (5' 6" gauge)—concld.

Terms of contracts-concld.

Power of Company to surrender contract .- Nil.

Terms of working.—From the gross earnings for any calendar year will be deducted working expenses, and the net earnings applied towards payment to Government of interest on advances of capital made by it to the Company and for repayment of the interest paid by it to the Company for that year, the balance to be divided in proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

#### Statistics of working-

								T_A	BLE I.					TABL	e II.	
	Calc	ndar	year			Capital outlas	Gross	Not	Per cent.		Com-	Gain or loss	Scin	DIA.	Indian	MIDLAND.
						to end of oach year.	oarnings.	earnings.	on capital outlay.	Interest.	share of net earnings.	to the State.	Earnings per mile per week.	Pro: of exp: to carnings.	Earnings per mile per week.	Pro: of exp; to carnings.
1878						Rs.	Rs.	Rs.		R9.	R.	Rs.	Rs.	100.00	Rs.	
1879	:	:	:	:	:	73,22,551	90,916	-33,772		3,06,178	] :::	-3,39,950	54 39	133·30 134·95	:::	:::
1880 1881		•	•	•	:	81,63,253 38,16,663	2,01,923 3,01,681	20,129 75,349	0-25 0-91	8,57,620 8,48,809		-3,37,491 -2,70,467	58 81	88.05 77.85		
1882 1883	÷	:	:	:	:	87,63,714 92,92,537	3,29,299 3,38,511	92,231 1,59,716	1.05 1.72	3,47,303 3,56,750		-2,55,072 -1,97,034	85 87	71.90 52.82	:::	I :::
1884	·					1,19,68,111	3,68,326	1.72,603	1.12	3,74,122		<b>-2</b> ,01,519	95	53:14		:::
1885 1886	:	:	:	:	:	1,60,14,107 2,48,06,293	3,94,081 3,91,832	1,99,680 2,14,526	1·24 0·86	6,48,112 18,69,268	i	-4,48,432 $-16,51,742$	101 101	49·33 49·69		82.03
1887	•	•	•	•	•	5,10,96,457	6,32,204	2,78,043	0.24	20,00,181	"	-17,22,141	117	46.62	81	80.63
1888 1889	:	:	:	:	:	6,96,63,213 7,81,45,085	10,27,638 30,69,255	3,74,201 6,83,111	0.54 0.81	28,55,488 31,24,456		-24,81,284 -24,91,345	95	47.74	99 92	72·53 77·32
1890 1891	:	:	:	:	:	8,32,79,427 8,52,46,148	31,24,36 <b>5</b> 41,62,361	5,99,780 13,52,172	0·72 1·59	33,94,157 33,12,200		- 27,94,377 - 19,60,028	••• •••		86 115	80.80 67.51
1892						8,65,79,006	44,77,625 44,59,053	17,26,260 17,00,409	1·99 1·95	37,23,985 41,40,194		-19, <b>97</b> ,725			124	61.45
1803 1804	:	:	•	:	:	8,71,62,843 8,78,06,437 8,81,40,985	52,22,033 44,91,707	22,02,334 16,48,360	2·51 1 87	42,59,815	:::	-24,39,785 -20,57,481	•••	···	123 144	61-87 57-88
1895	•	•	•	•	•	1	48,51,951		2.18	45,97,495	"	-29,49,135		٠	124	63.30
1896 1897	:	:	:	:	:	9,25,53,896 9,77,94,421 9,96,74,805	54.89.540	20,17,920 24,06,565	2.46	44,23,983 42,53,893		-24,06,154 -18,47,328	•••	*	134 150	59.41 56.16
1893 1899	:		:	:	:	10,16,31,077	56,25,823 61,77,226	25,11,911 27,82,950	2·53 2·71	39,99,986 39,75,411	:::	14,88,075 11,92,461	:::	•••	147 152	55·35 57·08
1000						10,31,35,002 10,58,27,081	90,60,560 82,13,068	48,72,287 42,50,587	4·72 1·03	40,03,525 88,63,725	1,88,164	+ 8,68,692 + 1,98,698			213	46:23
1901 1902 1903	:	:	:	:	:	10,62,11,714	90,49,628	44,86,267 40,92,942	4·22 3·73	41,04,505 41,85,502	7,330 2,062	+ 3,74,492 - 94,622		•••	199 209 180	48·43 50·48 49·35
	•	•	•	•	•	11,22,35,779	82,00,712	41,48,862	3.70	42,59,767		-1,10,905		***	183	19:96
1904 1905 1906		:	:	:	:	11,31,43,178	79,91,323	40,81,528	3·61 4·31	42,77,178 42,96,288		- 1,92.645 + 6,23,277	•••		178 284	48·89 50·15

# 5 (g) Gwalior Light railway (2' 0" gauge)-

#### Details of construction-

The open mileage of this railway is 183:53 miles, and may be divided into the following sections:—(1) Gwalior to Sipri, 73:81 miles, (2) Gwalior to Bhind, 52:33 miles, and (3) Gwalior to Sabalgurh, 57:39 miles. The several sections were opened in 1899 and 1904, respectively.

Besides the above there are 66:39 miles under construction.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails, laid on sal and steel trough sleepers.

Ballast.—The line is fully ballasted throughout with broken stone, sand and moorum.

Fencing .- The line is fenced between Gwalior and Morar only.

Curves.—The sharpest curve in station yards has a radius of 200 feet. The sharpest curve out of stations has a radius of 955 feet.

Gradients.—The ruling gradient is 1 in 60.

# Terms of contract-

The railway is worked under the following agreement :-

Agreement of 11th October 1900 (between the Government of His Highness the Maharaja Scindia of Gwalier and the Indian Midland Railway Company) for working.

The general conditions of the agreement are as follows :-

Government aid .- Nil. The Gwalior Light railway is the property of the Gwalior Durbar.

Currency of contract.—Rither party may determine the agreement by giving three months' notice.

# History of railways constructed and in progress. [For Index see page 112.]

the companies of 2 × representational shades being the state of

Number Main head 5 Sub-heads (a) to (h). GREAT INDIAN PENINSULA RAILWAY SYSTEM—concld.

(5) (g) Gwalior Light railway (2' 0" gauge)—concld. Terms of contract - concld.

Terms of working.—The gross receipts are collected and treated as receipts of the Indian Midland Railway Company and from them are deducted the actual expenditure in the Traffic and Audit departments for station and train staff, audit clerks, on printing and stationery and stores consumed, and all other expenses connected therewith, and 5 per cent. per annum for construction and maintenance of accommodation required for the exclusive use of the light railway; 7½ per cent. for ballast, permanent-way, etc., including maintenance and renewal, plus 15 per cent. to cover supervision and general charges other than those rendered in the accounts. The balance is paid over to the Gwalior Durbar.

Rates and fares .- Rates and fares are the same as those in force on the Great Indian Peninsula railway.

#### Statistics of working-

												···	<u> </u>			
												Та	BLE 1.		TABI.	r II.
			,	Calor	dar :	year.					Capital outlay to end of pach year.	Gross carnings,	Net carnings.	Per cont. on capital outlay.	Farnings per mile per week.	Proportion of expenses to earnings
1							-		•		<b>Ъ</b> .	R.	R4.		Rs.	
1896 1897 1898 1899 1900	:	:	:	:	:	:	:	:	:		2,106 1,03,553 9,30,815 22,79,267 27,10,557	 4,094 84,617	  -4,113 -137	  	   6 13	 258:32 100:16
1901 1902 1903 1904 1905	:	:	•	:	:	:	:	:	:	:	81,07,277 39,77,104 41,76,953 46,0,93 54,72,847	82,227 1,09,577 1,66,002 1,83,284 1,82,705	-520 9,346 68,256 52,501 52,745	 0:33 1:63 1:13 0:96	13 17 25 22 20	100-68 91-47 58-90 71:36 72*20
1906		•	•								57,87,428	2,58,223	1.12,211	1.94	27	56.54

#### 5 (A) Matheran Light railway (2' 0" gauge)-

#### Details of construction -

The line, from Neral station on the Great Indian Peninsula railway to the hill station of Matheran, will be 12.61 miles long.

Its construction by Mr. Abdul Husein Adamjee Peerbhoy of Bombay has been authorized by an order contained in the Bombay Government, Public Works Department (Railway), Notification No. 34, dated the 28th July 1904. On completion the line will be worked by the Great Indian Peninsula Railway Company.

#### Terms of contract-

This railway will be maintained and worked under-

Terms—Contained in the order accompanying Bombay Government Notification No. 34, dated the 28th July 1904. The general conditions are as follows:—

Government aid .- Free provision of Government land.

Currency of agreement.—Government may purchase the undertaking as a going concern from the promoter on 1st January 1940, or at the expiration of any subsequent period of 5 years, at 25 times the average net earnings of the undertaking for the 3 calendar years immediately preceding the date of purchase.

Terms of working .- Not yet settled. .

Rates and fares .- Certain maxima have been fixed.

Number Main head 6 Sub-heads (a) to (i).

## MADRAS RAILWAY SYSTEM-

Chairman.-Lieutenant-Colonel R. Gardiner, R.E.

Secretary .- W. H. Cole. Esq., M.I.C.E.,

Offices. -1, Broad Street Place, Finsbury Circus, London, E. C.

Lines comprising the system.—The Madras railway system is made up of-

								Open line.	Under construction or sanctioned for construction.	Total.
								Miles.	Miles,	Miles.
(a) Madras railway						(5' 6" gange) .		904.01	1 00	905.01
(b) Azhikal-Mangalore extension .						(5' 6" gange) .		56.85	20:91	77.26
(c) Kolar Gold-fields railway .						(5' 6" gauge) .		9*88	•••	9.88
(d) Madras (North-East line) (Souther	rn	soctio	n of	tho	East	(5' 6" gauge) .		497:19	0.82	498.04
Coast (State) railway)									0.55	2011 09
(e) Nilgiri railway						(3' 34" gange) .		16.99	11.75	28.74
						(3' 34" gauge)	-	64.75		64.75
(a) Moranour-Dharmanuri railway			_			(2' 6" gaugo) .		18:58	•••	18.28
(h) Tirupattur-Krishnagiri railway	•	•	•	•	•	(2' 6" gauge) .	•	25.38	•••	
(ii) Colone Atten millioner	•	•	•	•	•	(5' C' sauge)	•	40 00		25.38
(i) Salem-Attur railway	•	•	•	•	•	(5' 6" gauge) .	•	***	86 06	<b>36</b> ·06
						Total		1,593.08	70.57	1,668-65

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 6 Sub-heads (a) to (i) . MADRAS RAILWAY SYSTEM—cont.d.

#### Running powers-

Foreign lines over Home line—

Beneal-Nagpur railway, Waltair to Vizagapatam (including Wharf and Swamp lines)

Southern Mahratta railway, Tudepalli to Bezwada

Nizam's Guaranteed State railway, distant signal at Bezwada to Bezwada station

Total 8:83

#### 6 (a) Madras railway proper (5' 6" gauge)—

#### Details of construction-

The open mileage of the Madras railway proper amounts to 90 F01 miles. This may be divided into (1) the South-West line, main line (Madras to Azhikal), 472-73 miles; branches, 123 miles: and (2) the North-West line (Arkonam to Raichur), 308-28 miles. Of the above 43-13 miles are double line.

There was, in addition, 1 mile under construction.

Sanction was first given to the construction of the South-West line in 1853 and it was opened through to Calicut in 1888. The North-West line was sanctioned in 1859 and was opened through to Raichur in 1871.

Permanent-way.—The present type of permanent-way for the main line is 80-lb. bull-headed steel rails, laid on east iron pots, each weighing 112 lbs. The section, Calicut to Azbikal, is laid with 60-lb. flat-footed steel rails on wooden sleepers.

Ballast.-The line is ballasted with stone and sand, chiefly the former.

Forcing .- The line is fenced throughout.

Curves.—The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient between Madras and Mallapuram is 1 in 200; between Mallapuram and Calicut, 1 in 100 (except at Mallapuram Ghat where it is 1 in 70 and at Walayar Ghat where it is 1 in 62); between Calicut and Cannanore, 1 in 150; between Jalarpet and Bangalore, 1 in 100 (except at Kuppam Ghat where it is 1 in 66); between Podanur and Mettupalaiyam, 1 in 50; between Olavakkot and Palghat, 1 in 106; between Walajah Roud and Ranipet, 1 in 150; and between Arkonam and Raichur, 1 in 80 (except at Ballapalli Ghat where it is 1 in 66).

#### Terms of contracts-

James Branch

The Madras railway is worked under the following contracts:-

Contracts of -22nd December 1852 (South-West line).

19th December 1855 (South-West line).

13th August 1858 (North-West line).

2nd January 1871 (Amalgamation).

18th January 1901 (Calicut-Azhikal extension).

1st November 1901 (Walajah Road (Arcot)-Ranipet branch).

The general conditions of the contracts are as follows:-

Government aid.—Guarantee of interest in sterling at 5 per cent. for term of contract. On some portion of the share capital and on debentures lower rates of interest are guaranteed. Land was provided free of cest.

Currency of contracts.—In ninety-nine years from 1st April 1857 the line reverts to Government on paying for the rolling-stock at its fair value, provided the Company does not previously give notice of its intention to surrender the contract. Government may, within six months after the expiration of 25 or 50 years of the term, determine the contract by purchase at the mean market value of the shares during the three preceding years. Possession to be taken of the railway at the half-yearly day next but one following the notice. Government may also determine the contract at any time, on giving three months' notice, if the Company fails to observe its obligations, Government repaying the capital expended.

Norm.—Government relinquished their right to determine the centract at the end of the 25th year, and the only remaining opportunity of giving notice of purchase will be in 1907 within six mentls after 1st April.

Power of Company to surrender contract.—The Company may, at any time, surrender on six months' notice, receiving back (either in cash or by annuity at the option of the Government) the capital expended.

Terms of working.—As to the lines covered by the contract of 2nd January 1971, after deducting the working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work', subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), the surplus profits, after repayment of the guaranteed interest of each half-year converted at the rate of exchange of 1s. 10d. per rupee, are divided equally between Government and the Company. As to the Calicut-Azhikal railway working expenses are calculated at the average rate prevailing in each half-year over the entire system, and if the net earnings in any half-year exceed the interest charges converted at the prescribed rate of exchange, one-fifth belongs to the Company; but any deficiency in one half-year is a first charge on the net receipts of that and the next succeeding half-year of every line of railway for the time being belonging to the Company. Subject to the provisions in the contract of 18th January 1901 the covenants and provisions of the several principal indentures apply to the Calicut-Azhikal railway.

Rates and fares.—Under the contract Government fixed maxima rates and fares, which cannot be altered by Government until the net receipts exceed 10 per cent. on the capital outlay. The fixed maxima rates cannot be altered by the Company without Government sanction. Authority, however, has been given to the Company, by an executive order, to vary its rates within the prescribed maxima without reference to Government.

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 6 . MADRAS RAILWAY SYSTEM—contd.

6 (a) Madras railway proper (5' 6" gauge)-concld.

Statistics of working-

						1			'l A	BLE I.	•				TABLE	и.
<b>&gt;</b>		Culor	ıı.be	year			Capital outlay to end of each year.	Отона еаг <b>па</b> п <b>д</b> ы.	Net earnings.	Per cent. on capital outlay.	(inarantoed interest (at current rates of exchange).	Com- plany's share of net earnings.	Gain or loss to the State.	Calon- dar year.	Earn- ings por mile per week.	Proportion of exponent to carnings.
	_	-					Bs.	Rs.	Ru.		Rs.	Rs.	Ra,	1856	Re.	K1-aa
1879 .	,			•			11,15,68,193	66,26,186	20,75,170	1.81	57,04,205		36,29,035	1857 1858	75 91 98	51.66 47.13
1880 .							11,39,78,220	61,62,* 16	19,57,137	1.73	<b>57,16,</b> 332		-37,59,195	1859 1860	122 117	55·53 60·35 78·50
1881 .							11,40,07,803	63.11,312	20,75,856	1.82	57,16,365		-36,40,509	1861	91	71.08
1882 .		·	·				11,39,69,608	69,18,571	25,70,811	2 25	56,89,011		-31,18,170	1862 1868	84 110	74·02 68·57
1883 .		·			٠		11,39,92,074	66,31,909	25,26,519	2.32	57,08,416		-31,81,867	1864 1865	183 145	49.62 45.69
1884 .		•	•	·	Ī	·	11,12,51,161	71,41,315	20,35,687	2.57	61,23,432	Ì	-34,87,745	1866 1867	147 153	45·62 43·47
			•	•	٠	•	11,50,33,160	76,57,993	32,79,168	2 85	67,38,206	l	-31,57,038	1868 1869	181 171	41·48 49·16
1885 .		•	•	•	•	•	11,59,81,297	79,66,097	32,19,213	2.78	71,24,952	1	-38,95,700	1870 1871	146 139	52·84 51·27
1866 .		•	•	•	•	٠	11,40.70 190	81,72,135	28,80,029	2 52	73,20,207		-41,10,178	1872 1873	143 157	52·19 56·94
1887 .		٠	•	•	•	•	11,53,78,656	85,31,054	35,21,615	3 05	76,23,851		-41,02,236	1874 1875	132	64.67
1888 .	•	•	•	•	•	•	11,63,e4,00	91,10,894	37,38,421	3.51	76,69,934		-39,31,513	1676 1877	144 159 225	70·20 64·30 59·20
1889		•	•	•	•	•	11,79,84,231	95,06,131	45,21,140	2 83	68,85,958		- 23,64,478	1878 1879	118 148	76.08 68.68
1690		٠	•	•	•	•	11,70,64,201	93,11,6-8	39,06,529	3.38	73,92,186		-34,85,657	1880	138	69·24 67·1
1891		•	•	•	•	•	1	96.21.670	12.92,133	3 .8	83,62,369	1	-40,70,236	1881 1882 1883	155 148	62.8
1892		•	•	•	•	•	11,97,71,835	,		4.50	94,5" 732		-30,60,990	1884 1885	160	58·89 57·11
1898	•	٠	•	•	٠	•	12,03,89,499	1,05,05,036	51 21,712	1	96,56,469		-47,08,606	1846 1887	178 189	59:40 64:70
1894		•	•	•	•	•	12,05.25,315	1,03,21,012	49,47,863	4 10	1 ' '		1	1888	195	58.7
1895		٠	•	•	•	•	12,05,91,797	1,12,05,407	58,10.310	4.80	96,17.435	53,195	-38,60,320	1889 1890	209 218	58.9° 52.4
1896		•	•	•	•	•	1	1,08,80.251	53,85,291	4.44	89,92,681		-36,07,393	1891 1892	214	58·20 55·40
1897				•	•	•	12.15,01,808	1,14,65,314	59,82,565	4.92	81,81,597	91,135	-25,90,167	1893 18 <b>94</b>	241 237 257	48:31 52:00
1898			•	•	•	•	12,22,69,990	1,07,20,453	51,72,657	4.43	82,40,191	90,516	29,18,090	1895 1896	249	47·55
1899					•		12,31,93,025	1,05,15 192	50,16,254	1.06	80,58,144		-30,41,890	1897 1898	268 246	47.6 49.5
1900		•	٠.	•			12,62,83,369	1,13,39,222	53,70,820	4 25	81,24,701		-27,53,881	1699 1900	240 254	52.4
1901			٠,				13,13 51,379	1,14,86,803	57,55,603	4.40	83,15,733		-25,30,130	1901 1902	253 256	51.7 49.6 50.2
1902							13,50,23,683	1,19,41,074	57,91,420	4.29	84,41,464		-26,50,044	1903	261	50°2 55°8 54°4
1908							13,61,05,517	1,26,21,022	55,67,861	4.08	84,39,831		-28,71,967	1905 1906	298 296 321	57·8 59·0
1904							13,71,10,600	1,37,65,0€4	62,73,135	4.57	86,30,058		-23,56,923	1	"	""
1905							13,85,08,336	1,09,16,956	58,69,047	4.24	87,03,239		-28,31,192	i		
1906							14,02,39,676	1,50,91,141	61,79,289	4.40	87,71,265	1,25,000	-27,17,976			

# 6 (b) Azhikal-Mangalore extension (5' 6" gauge) -

Details of construction-

The open mileage (Azhikal to Kumbla) is 56 35 miles. It was sanctioned in 1901 and was opened in 1906. There are 20.91 miles (Kumbla to Mangalore) still under construction.

Permanent-way. - The permanent-way consists of 75-lb flat-footed steel rails laid on pyinkado, sal and jarrah sleepers Ballast .- The line is ballasted with laterite broken to 2 " gauge in cuttings and sand with laterite covering in banks.

Fencing .- The line is fenced throughout. Curves .- The sharpest curve is of 2,865 feet radius.

Gradients .- The ruling gradient is 1 in 90.

Terms of contract-

The line is worked under the following contract :-

Contract of -30th December 1903 (between the Secretary of State and the Madras Railway Company) for construction, maintenance and working—supplemental to the contract of 31st December 1902, for working a portion of the late East Coast (State) railway.

The general conditions of the contract are as follows :-

Government aid .- The line is the property of the State.

Currency of contract.—The contract is to continue in force till the 31st December 1907.

Terms of working.—The working expenses are to include per half-year any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work, ' subject to a maxium charge on such account of Rs. 15 per mile of line open

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 6 Sub-heads (a) to (i). MADRAS BAILWAY SYSTEM—contd.

6 (b) Azhikal-Mangalore extension (b' 6" gauge) - concld.

Terms of contract-concld.

in each half-year; a sum not exceeding Rs. 40 for every mile of line open to traffic for Government supervision and control; and the following:—

The actual expenditure incurred under the account heads of "Maintenance and renewal of permanent-way," "Repairs of bridges, etc., wages and materials," "Conservancy of rivers," and "Repairs of staff quarters;"

and the share of general working expenses of the system under the remaining heads of account in proportion to the gross earnings of the state railway.

The balance of the gross earnings to belong to Government.

Rates and fares. -Government exercise full control over rates and fares.

Statistics of working-

		Т	ABLE I.				TA	al <b>d I</b> I.
Calendar year.	Capital out- lay to end of the year.	Gross carnings.	Net oarnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Earnings por mile per week.	Proportion of expenses to earnings.
	Rs.	Re.	Rs.		Rs.	· Rs.	Ba.	
1906	1,20,19,658	30,310	14,990	0.12	4,17,122	-4,02,132	93	50.54

#### 6 (c) Kolar Gold-fields railway (5' 6" gauge)—

The railway was constructed by the Mysore State in order to provide facilities for the gold-fields.

Details of construction -

The railway is 9.88 miles long and connects Bowringpet with Marikuppam. Its construction was sanctioned in 1892 and it was opened in 1894.

Permanent-way. - The line is laid with 76-lb. bull-headed steel rails on cast iron pot sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing .- The line is fenced throughout.

Curves .- There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 66.

Terms of contract-

The railway is worked under the following agreement :-

Agreement of—1st July 1902 (between the Mysore Government and the Madras Railway Company) for working and maintenance with effect from 1st January 1901.

The general conditions of the agreement are as follows :-

Government aid .- The line is the property of the Mysore State.

Currency of agreement.—The agreement to remain in force subject to six months' notice from either side on the 30th of June or the 31st of December of any year.

Terms of working.—The Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system, including this line, bear to the gross earnings of that system, and 5 percent. of the gross earnings of the railway for rolling-stock.

Rates and fares.—Subject to certain special rates and fares, the same rates, etc., as are in force from time to time on the Madras railway.

												TAB	LE I.		ř.		TAB	le il
,	•			•	Q	lend	lar y	ear,			j <b>a</b> c		Capital outlay to end of each year.	Gross earnings,	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings
													Rs.	Rs.	Rs.		Re.	
192 193	:	:	•	:	:	•	•	:	:	:	:	•	27,661 5,27,634		•••			***
194			·	:						:	. is. •		6,56,175	75,771	29,273	46	240	61.87
95	٠	•	•	•	•	•	٠	•	•	٠	co <b>l</b> in	•	6,61,654	1,52,953	66,879	10.03	294	56-60
196 197 198 199 100			٠.										7,45,004	1,55,817	63,287	8:50	299	59-12
97	•	•	•	•	•		•	•	•			•	7,91.074	2,08,854	90,278	11.41	402	56-7
38	٠	•	•	•	•	•	•	•	•	٠	•	•	8,09,537	2,04,002 1,77,667	82,133	10 15	892	89:8
00 00	•	•	•	•	•	•	•	•	•	•	•	•	10,79,552 10,77,901	2,08,892	56,827 67,093	5·27 6·22	342 402	68 0
	•	•	٠.,	. <b>.</b> .	•	•	٠	•	•	•	•				-		902	67.8
01 02 03 04 04		•	• *	` •		•							11,20,R30	2,17,661	91,877 84,864	8-20	421	57-7
12	•	•	•	٠	•	٠	•	•	•	•	•		11.88,480	2,16,629 2,07,257 2,44,744	84,864	7.45	422	60.8
9	•	•	•	•	•	•	•	•	•	•	•	.	11,62,504 11,73,128	2,07,257	75,237 89,230	1 6.47 I	409	67-7
Š	•	•	•	:	•	•			•	•	•	: 1	11,87,864	1,88,402	67,600	7·61 5·69	476 867	681
	-	•	٠.	•		•	•	•	•	•	•	- 1	. #	e,en,equ	antama '	1 4	901	66-1
08	٠	•	•,	•	•	•	•	• •		•	٠	.	11,96,520	2,00,400	68,275	5.71	690 -	851

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 6 Sab-heads (a) to (i) . MADRAS RAILWAY SYSTEM—contd.

6 (d) Madras (North-East line) railway (5' 6" gauge)—

Details of construction-

The North-East line, which is the southern portion of the old East Coast State railway, is 497'19 miles long. It consists of 485'26 miles of main line (Washermenpet to Waltair) and 11'93 miles of branches.

Its construction was sauctioned in 1890 and it was opened throughout in 1900.

The line from Korukkupettai to Basin Bridge Junction, 0 85 mile was under construction.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on wooden and poa-pod steel sleepers.

The wooden sleepers are gradually being renewed by cast iron pot sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing .- The line is fenced only in the vicinity of towns, stations and level crossings.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient between Madras and Kistna canal is 1 in 200, and between Kistna canal and Waltair 1 in 150.

#### Terms of contract-

The line is worked under the following contract:-

Contract of—31st December 1902 (between the Secretary of State and the Madras Railway Company) for maintenance, management and working.

The general conditions of the contract are as follows :-

Currency of contract.—The contract is to continue in force till the 31st December 1907. If the original contract with the Company, dated the 2nd January 1871, is for any reason terminated under the provisions thereof prior to the expiry of the term of this contract, the latter also will, ipso facto, terminate at the same time. The contract may also be terminated after twelve months' notice on the 1st April of any year subsequent to 1904.

If the contract is determined by notice at any time previous to the 1st April 1907, and if the ratio of the working expenses to the gross earnings of the Company shall have been raised, by reason of the Company having worked the State railway under this contract, so that the total working expenses of the Company's system from the 1st January 1901 to the termination of the contract shall exceed 50 per cent. of the total gross earnings of the Company's system during such period, the Company will be entitled to suitable compensation for such increase.

Terms of working.—The working expenses of the State railway are to include per half-year any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every mile of line open to traffic for Government supervision and control; and the following:—

the actual expenditure incurred under the account heads of "Maintenance and renewal of permanent-way,"
"Repairs of bridges, etc., wages and materials," "Conservancy of rivers," and "Repairs of staff quarters"
the share of the general working expenses of the system under the remaining heads of account in proportion to
the gross earnings of the State railway;

the allowances and interest payable under the contract for the use by the State vailway of the Company's terminal station at Madras;

and the expenditure incurred by the Company in replacing or repairing the State railway locomotive engines and tenders;

The balance of the gross earnings to belong to Government.

Rates and fares.—Government exercise full control over rates and fares.

Government have reserved the power to require, at six months' notice, the re-transfer of the Junction station at Waltair and the branch taking off from the Junction to Vizagapatam.

						TA	BLE I.				TABI	E IL	
c	alen	der :	year.		Capital outlay to end of each year.	Gross earnings.	. Net carnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State,	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1890		•	•		Rs. 3,79,490	Rs.	Rs.		Ra. / 7,590	Rs7,590	Rs		The figures prior to 1901 relate to the whole of the East Coast (State) rail-
1891 1892 1898 1994 1895	:		:	•	1,10,69,894 2,60,11,131 8,58,67,473 4,39,47,727 5,09,41,876	4,98,660 14,80,678 19,04,251	 1,53,792 1,50,921 9,29,184	 0:43 0:84 0:65	2,33,786 7,41,621 13,48,868 15,92,909 19,12,886	-2,33,786 -7,41,621 -11,95,136 -14,41,988 -15,83,702	 68 98 90	 84·69 89·81 82·71	way.
1896 1897 1898 1899 1900		:	:	:	6,38,64,948 7,22,26,070 8,24,02,269 8,65,93,097 8,80,71,781	24,66,573 29,21,162 28,10,742 43,92,237 64,04,543	5,39,901 8,92,453 6,69,891 15,37,294 26,54,794	0.85 1.23 0.81 1.78 8.01	23,72,875 26,96,796 80,98,828 35,14,602 34,46,555	-18,32,974 -18,04,343 -24,28,997 -19,77,308 -7,91,761	94 100 94 104 148	77-98 69-59 76-46 65-11 56-10	
1901 1908 1908 1904 1905	:	:	:	:	6,07,27,275 6,16,89,605 6,35,83,510 6,43,95,889 6,50,38,641	45,68,155 45,46,551 45,18,656 50,48,867 67,36,215	20,31,210 16,19,128 15,53,837 15,61,875 26,65,781	3·84 2·62 2·45 <b>9·43</b> 4·10	24,51,072 24,46,187 24,82,162 25,44,580 25,77,504	-4,19,862 8,27,059 9,28,825 9,82,705 +88,277	176 177 176 196 262	65-62 64-39 65-62 69-08 60-48	
1906	•		•	•	6,57,16,083	60,68,407	24,19,766	8.68	26,07,849	-1,87,583	236	60-18	,

## History of railways constructed and in progress. [For Index see page 112.]

Number Sub-heads (a) to (i) MADRAS RAILWAY SYSTEM -contd.

## 6 (e) Nilgiri railway (3' 3\frac{3}{2}" gauge)-

The old Nilgiri Railway Company was registered on the 30th September 1835 with a nominal capital of Rs. 25,00,000 and a contract was executed between the Secretary of State and that Company on the 26th February 1886. The old Company went into liquidation in April 1894, and a new Company was formed in February 1896 to purchase the line from the old Company and supply the capital required to complete it, and to construct the proposed extension to Ootacamund. The line from Mettupalaiyam to Coonoor was completed by the new Company and opened for traffic on the 15th June 1899. On the offer of the new Company to sell the line it was purchased by Government for £235,000 en the 1st January 1908.

## Details of construction-

The open mileage of this railway is 16.99 miles. The line connects Mettupalaiyam with Coonoor. It was sanctioned in 1892 and was opened in 1899.

Besides the above there are under construction 11.75 miles, viz., from Cooncor to Octacamund.

Permanent-way. - The permanent-way consists of flat-footed steel rails, 50-lb. to the yard, laid on pyinkado eleepers. Between Kallar and Coonoor there is also a central rack rail with channel bars.

Ballast.-The line is ballasted with clean broken granite.

Fencing .- The line is fenced throughout.

Curves .- The sharpest curve is of 318 feet radius.

Gradients.—The ruling gradient is 1 in 12.5.

#### Terms of contract-

The railway is worked by the Madrus Railway Company under the following terms (approved in Government of India letter No. 563 R. T., dated the 27th June 1903)-

Government aid .- The line is the property of the State.

Currency of agreement—
Power to determine agreement—
The agreement may be terminated at any time on six months' notice from either party.

Terms of working.—The Nilgiri railway to pay actual outlay on engineering maintenance and for fuel, and repairs and renewals of engines and carriage and wagon stock. For all other expenses of working the Madras railway to receive 25 per cent. of gross earnings, plus 10 per cent. of the net receipts.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

#### Statistics of working-

				-		Тав	LE I.					TABL	= II.
Calend	dar yes	ır.	Capital outlay to end of each year.	Orosa earnings.	Net carnings.	Per cent. on capital outlay.	Subsidy from Govern- ment.	Total income.	Percentage of total income on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
			Rs.	Bs.	Re.		Rs.	Rs.		Ra.	Rs.	Rs.	*
1890			67,850					•••					
1891 1892 1893 1894 1895 1896 1897 1896 1897 1899 1900	:		2,89,134 8,89,751 15,50,000 18,50,000 22,60,000 38,64,50,74 44,54,085 47,79,944 48,96,490 48,74,254 49,08,431 35,24,265 35,64,423 48,96,192	   84,448 1,76,032 2,41,336 3,09,063 2,74,905 2,90,129 8,15,492	   20,209 86,642 1,37,883 1,12,111 73,988 66,162 48,972	     1.77 2.83 2.28 2.10 1.85	24,392 23,006	   44,601 1,09,648 1,12,111 73,988 6,162	      2.24 2.83 2.28 2.10 1.85	    1,65,497 1,85,878	-91,509 -67,222	      175 200 275 852 911 928 931	76 06 42 83 42 87 65 78 78 99 77 20
1905	•	•	50,08,547	3,20.242	87,202	0.74		87,202	074	1,38,327	-1,01,125	362	84·48 88·86

## 6 (f) Shoranur-Cochin railway (3' 33" gauge)-

## Details of construction-

The railway is 64'75 miles long and connects Shoranur with Ernakulam. It was sanctioned in 1899 and opened in 1902.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails on wooden sleepers.

Ballast.-The line is ballasted throughout with stone and sand, chiefly the former.

Fencing .- The line is fenced in the vicinity of towns, stations and level crossings.

Curves.—The sharpest curve is of 818:57 feet radius.

Gradients .- The ruling gradient is 1 in 80.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 6 Sub-heads (a) to (i) . MADRAS RAILWAY SYSTEM—contd.

6 1f) Shorannr-Cochin railway (3' 3}" gauge)-concld.

#### Terms of contract-

The Shoranur-Cochin railway is worked under the following agreement:-

Agreement of -- 1st January 1901 (between His Highness the Raja of Cochin and the Madras Railway Company) for construction and working.

The general conditions of the agreement are as follows:-

Government aid .- The line is the property of the Cochin State.

Currency of agreement.—This agreement is to remain in force until the termination of the agreement, dated the 2nd January 1871, between the Secretary of State and the Madras Railway Company.

Terms of working.—The Company charges for working the same proportion of the total revenue expenditure as the gross earnings of the Shoranur-Cochin railway bear to the gross earnings of the Madras railway system including the Shoranur-Cochin railway. After providing, from the net earnings, for the second contribution to the Madras Railway Provident Institution and for interest at the rate of 3 per cent. per annum on the booked capital expenditure of the Shoranur-Cochin railway including land, the balance is divisible between the Cochin Durbar and the Madras Railway Company in the proportion of four-fifths to the Durbar and one-fifth to the Company.

Rates and fares.—The same as are generally applicable from time to time to the system of railways worked by the Company.

#### Statistics of working-

				ie.				6		T	A BI	LE I.				TABL	в П.
,				Calo	ndar	year.	,					Capital outlay to end of each year.	Gross carnings.	Net earnings.	Per cent, ou capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
			•								_	Rs.	Rs.	Rs.		Rs.	
1898 1899 1900	:	:	:	:	:	:	:	:	:	:	:	53,921 80,927 28,47,394	 	 	 	 	•••
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:	:	:		50,82,280 63,66,301 64,41,390 67,88,610 68,30,214	1,34,845 3,52,964 3,92,782 3,86,945	 73,299 1,98,023 1,94,244 1,61,395	1·15 3·07 2·86 2·36	 69 105 117 115	45:64 43:90 50:55 58:29
1906									٠.	-		69,59,349	3,91,378	1,55,689	2.27	116	60*22

#### 6 (g) Morappur-Dharmapuri railway (2' 6" gauge)— Details of construction—

The railway is 18:53 miles long. It was sanctioned in 1902 as a famine feeder line and was opened in 1906.

\*\*Permanent way.\*\*—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of pyinkado.

Ballast.—The line is ballasted with stone in cuttings and in banks with moorum with stone covering broken to 2" gauge. Fencing.—The line is unfenced.

Curves .- The sharpest curve is of 955 feet radius.

Gradients.—The suarpest curve is of 955 feet rad Gradients.—The ruling gradient is 1 in 67.

#### Terms of contract-

The line is worked under the following contract :-

Contract of -4th October 1904 (between the Secretary of State and the Madras Railway Company) for construction, maintenance and working.

The general conditions of the contract are as follows:-

Government aid .- The line is the property of the State.

Currency of contract .- The contract is to continue in force till the 31st December 1907.

Terms of working.—The working expenses are to include per half-year any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every mile of open line for Government supervision and control; the Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system including this line bear to the gross earnings of that system, provided that such share shall in no case be less than an average sum of Rs. 35 per mile per week. The balance of the gross earnings to belong to Government.

Rates and fares. - Government exercise full control over rates and fares.

			TAR	ole I.			Tabi	z II.
Calendar year.	Capital outlay to end of the year.	Gross carnings.	Net earnings.	Per cent, on espital outlay.	Laterest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
1906	Rs. 8,96,836	Rs. 82,702	Rs. —431	•••	Ra. 30,280	Ra. 80,711	Ra.	101.32

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 6 Sub-heads (a) to (i). MADRAS RAILWAY SYSTEM—concid.

6 (A) Tirupattur-Krishnagiri railway (2' 6" gauge)-

Details of construction-

The railway is 25:38 miles long. It was sanctioned in 1902 as a famine feeder line and was opened in 1905.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of Malabar teak. Ballast .- The line is ballasted with stone in cuttings and moorum in banks with a stone covering broken to 2" gauge.

Fencing.—The line is unfenced. Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 67.

Terms of contract-

The line is the property of the State and is worked under the same contract and on the same terms and conditions as apply to the Morappur-Dharmapuri railway [6 (g)].

Statistics of working-

									TABLE	: I,				TAB	LR II.
	 Cal	lend	lar )	ear				Capital outlay to end of each year.	Gross earnings,	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to carnings.
1905 1906				•	•	•	•	Bs. 10,68,690 10,78,762	Rs. 12,8 <b>40</b> 46,276	Rs. —1,067 —1,825		Rs. 18,802 • 39,194	Rs. 19,869 41,019	Rs. 34	108·81 108·94

### 6 (i) Salem-Attur railway (5' 6" gauge)-

Details of construction-

The railway will be 36.06 miles long. It was sanctioned in 1903 as a famine feeder line; but the commencement of work has not yet been authorised.

Main head 7 - NAGDA-MUTTRA RAILWAY (5' 6" gauge)— Number Sub-head (a)

Details of construction-

This line which is under construction by the State, will be 380 50 miles long, viz., (1) main line, Nagda to Mattra 340.50 miles, and, (2), Baran branch, Kotah to Baran, 40 miles.

The construction of the main line was sanctioned in 1905 and the Baran branch in 1906.

Chairman-Charles Albert Winter, Esq.

Secretary-II. Rendel, Esq.

Offices-Winchester House, 50, Old Broad Street, London, E. C.

Lines comprising the system.—The Nizam's Guaranteed State railway system is made up of-

						•							Opon line. Miles.
(a) Nizam's Guaranteed State railway (5 6 gauge) .	•	•			*				•				390 13
<ul> <li>(a) Nizom's Guaranteed State railway (5' 6" gange).</li> <li>(b) Bezwada Extension railway (5' 6" gange).</li> <li>(c) Hydersbad-Godavari Vulley railway (3' 33" gange).</li> </ul>	٠	•	•			•							20.58
(c) Hyderabad-Godavari Valley railway (3 32 gauge)	•	•	•	•	•	•	•	•	٠	•	•	•	391.13
·										To	tal		741.84
Running powers— Home line over foreign line:— Distant signal at Bezwada to Bezwada station, Madras	(Nor	th-E	est li	ao), i	for p	asson	g <b>er</b> a	nd ge	ods t	trains	٠.		1.01

Up to the end of 1878 the line was worked by the Great Indian Peninsula Railway Company with its own rolling-stock. From January 1879 to the 31st December 1884 it was worked by State agency, and from January 1885 by His Highness the Nizam's Guaranteed State Railways Company. The section of the East Coast (State) railway, which extends from the frontier of His Highness the Nizam's dominions to the north distant signal of the Bezwada station, was worked by this Company as part of its own system up to December 1897, when it was transferred to the East Coast (State) railway. It was transferred back to the Company for working from the 1st January 1901.

## 8'(a) Nizam's Guaranteed State railway proper (5' 6" gauge)-

Details of construction—
The open mileage of the Nizam's Guaranteed State railway proper is 330-13 miles, which may be divided into main line (Wadi junction to the British frontier), 310-10 miles, and branches, 20-03 miles. Its construction was first sanctioned in 1871 and it was opened through in 1889.

Permanent-way.—The first 47 miles from Wadi are laid with 75-lb. bull-headed steel rails on cast iron pot sleepers the following 9 miles with 68-lb. double-headed steel rails on cast iron pot sleepers. The remainder of the line is laid with 661-lb. flat-footed steel rails on steel pea-pod sleepers, with the exception of the mixed (5' 6" and 3' 38") gauge line from Secunderabad to Hyderabad which has wooden sleepers under the same section of rail.

Ballast .- The line is ballasted throughout with stone and sand.

-The line is fenced from Wadi to Secunderabad, but from Secunderabad to the frontier only the station-Fencing.yards are fenced.

Curves. - The sharpest curve is of 1,800 feet radius.

Gradients. -- The ruling gradient is 1 in 100.

Terms of contract-

The railway is worked under the following:—

Contract of -27th December 1883 (between the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction, maintenance and working.

Institer No. 257 of -- 7th March 1903 from the Nizam's Government to the Railway Company as to rates and fares.

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 8 Sub-heads (a) to (c). NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—contd,

8 (a) Nizam's Guaranteed State railway proper (5' 6" gauge)—concld.

Terms of contract-concld.

The general conditions are as follows:-

Terms of contract,-The Nizam's Guaranteed State Railways Company was formed in 1883 for the purpose of sequiring and working the then existing railway and of constructing on the same gauge and working certain new lines, with a capital not exceeding £4,500,000 to be raised by the issue of shares and redeemable mortgage debentures (or as may be agreed upon), His Highness the Nizam's Government paying thereon for 20 years an annuity to be applied in payment of interest and towards a sinking fund for the redemption or reduction of capital. Land was provided free of charge.

Note.—The guarantee of His Highness the Nizam's Government on the share capital of £2 900,000 and £984,640 four per cent, debentures expired.

Currency of contract.-The contract is current for a period of 99 years. On expiry by effluxion of time the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The Nizam's Government has the option of purchasing the line on the 1st January 1914, 1934 or 1954, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent, thereon. In case of breach of contract by the Company the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Terms of working. - From gross earnings are deducted working expenses, and during the guaranteed period the net earnings are applied in the first instance to repayment of the annuity paid in the same half-year. Of the residue one moiety is utilised towards the repayment of previous payments of annuity and sums owing to the Nizam's Government, and the balance is paid to the Company. After the expiration of the annuity, a sum sufficient for payment of interest on the capital unredeemed will be retained by the Company, and of the balance one-half will be paid to the Nizam's Gov-

ernment, the remaining half being made over to the Company.

Rates and fares.—The rates and fares not to be higher than those adopted in 1883, except with the previous assent of the Nizam's Government.

Statistics of working-

											TAB	I.E	ſ.				TABI (Includes Be	zwada Exten-
	-			c	alen	lar y	oar.						Capital outlay to end of each year.	Gross earnings.	Not carnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings
1879 1880 1981 1882 1883	:		:							:		:	Ra. 1,16,46,997 1,21,90,870 1,22,85,291 1,22,27,794 1,22,83,560	Rs. 6,94,401 7,02,716 7,56,834 8,59,418 8,53,521	Rs. 89,925 2,48,604 2,88,666 3,75,099 2,37,932	0·77 2·04 2·35 3·07 1·94	Rs. 110 112 120 141 137	87:01 68:06 61:32 56:35 72:12
1884 1885 1886 1887 1888	:	:		:	:	:	:	:	:	:	:	:	1,23,08,720 2,05,60,998 2,71,49,342 2,69,71,143 8,55,11,854	9,72,917 11,13,950 13,81,077 15,48,891 17,76,075	4,70,227 4,87,024 6,94,524 5,52,905 7,57,467	3-82 2-97 <b>2-</b> 56 2-05 2-13	155 178 143 143 118	63:02 56:26 49:71 64:81 57:35
1889 1890 1891 1892 1898	:	:	:	:		:	:	•	:	:	:	:	3,59,46,922 8,77,11,194 8,95,18,791 8,95,48,395 4,01,96,909	22,57,462 25,07,268 27,76,437 27,80,642 30,61,605	7,72,513 10,39,590 12,57,860 13,24,959 14,36,451	2·15 2·76 3·19 3·35 3·57	129 140 151 181 136	66-96 59-74 54-7 52-31 53-06
1894 1895 1896 1897 1898	:	:	:	: : :	:	:	:	•	:	•	:	:	4,02,33,826 4,06,43,818 4,08,24,737 4,09,60,944 4,10,54,149	32,56,885 32,15,541 33,03,522 86,10,354 89,97,612	16,22,028 15,77,149 17,28,196 19,38,769 22,74,580	4:03 3:89 4:24 4:73 5:54	177 185 187 205 221	50-20 53-77 50-02 48-67 44-20
1899 1900 1901 1902 1908	:	:	:	:	:	:	:	<i>.</i>	:	:	:	:	4,15,68,731 4,17,49,124 4,24,30,543 4,28,89,527 4,30,13,668	41,10,201 49,12,056 40,77,927 44,06,494 43,18,630	25,01,046 28,41,985 26,48,120 26,82,533 25,38,386	6·02 6·81 6·24 6·25 5·90	240 286 236 254 251	43:45 41:55 83:55 39:86 41:78
1904 1905 1906	:	:	:	:	:	:	:	:		:	:	:	4.32,66,412 4,35,86,043 4,36,45,097	43,32,440 42,78,161 44,84,105	27,90,690 28,49,708 27,98,897	6:45 6:54 6:41	252 251 262	86·18 38·96 38·1

<sup>8: (</sup>b) Bezwada Extension railway (5' 6" gauge)-

Details of construction-This railway is 20 58 miles long and extends from the Hyderabad frontier to Bezwada. Its construction was sanctioned in 1886 and it was opened in 1889.

Permanent-way. - The line is laid with 661-lb. flat-footed steel rails on steel pen-pod eleepers, except at miles 317 and \$18 which are laid on wooden sleepers. \*\*

Ballast.—The line is ballasted throughout with stone and sand.

and the second of the second o

Fencing.—The line is fenced at stations only.

Curves.—There are no curves with a radius of less than 1,900 feet.

Gradients. - The ruling gradient is 1 in 100.

The line is maintained and worked for the same percentage of its gross earnings as the aggregate working expenses of the amalgamated undertaking of the 5' 6" gauge system bear to the aggregate gross earnings for the same half-year size 5 per cent. of the gross earnings of the Bezwada extension railway for the use of rolling-stock, and the cost of Government Audit establishment and interest on joint works at Bezwada.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 8 Sub-heads (a) to (c). NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—contd.

8 (b) Bezwada Extension railway (5'6" gauge)—concld. Statistics of working—

								Таві	lb I.				Тав	LB II.
	C	alend	ar y	ar.			Capital outlay to end of each year.	Gross earnings.	Net carnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion expenses to earnings.
1887 1888 1889 1890	:	:	:	:	:	•	Rs. 8,11,654 11,56,237 13,46,302 13,90,830	Rs  76,671 74,731	Rs.  16,326 16,318	  1 21 1 17	Rs. • 16,363 39,357 53,530 54,530	Rs. 16,363 39,357 37,204 38,212	Re.	* .
1891 1892 1893 1894 1895	:	:	:	:	:	:	14,11,077 14,17,674 14,21,456 14,26,901 14,31,642	87,367 98,779 1,08,386 1,71,016 95,119	29,699 28,347 33,972 71,270 95,119	2:03 2:00 2:39 5:00 6:64	56,26 <b>6</b> 56,584 56,888 57,122 57,239	-27,567 -28,237 -22,916 +14,148 +37,880	Guaranteed St	th the Nisam's ate railway
1896 1897 1898 1899 1900	:	:	:	:	:	•	14,35,588 14,95,418 15,01,343 15,02,651 15,02,618	73,057 1,66,800 1,69,061 3,12,172 8,56,146	38,496 56,645 95,390 1,84,365 2,38,989	2·68 3·79 6·35 12·27 15·90	57,406 58,388 59,569 60,101 60,106	-18,910 -1,738 +35,821 +1,24,264 +1,78,883		
1901 1902 1903 1904 1905	:	:	:	:	:	:	11,51,678 11,60,425 11,77,047 11,75,731 11,78,645	2,77,177 2,89,663 3,25,363 2,93,153 3,47,490	1,56,929 1,40,329 1,67,432 1,53,358 2,04,239	13·63 12·08 14·22 13·04 17·83	35,509 46,375 46,617 46,898 47,046	+1,21,420 +93,954 +1,20,715 +1,06,460 +1,57,193	*	
1906	•	•	٠	•	•		11,81,020	3,49,206	1,91,737	16:28	47,182	+1,44,555		

#### 8 (c) Hyderabad-Godavari Valley railway (3' 33" gauge)— Details of construction—

This railway connects Manmad with Hyderabad and is 391·13 miles long. Its construction was sanctioned in 1897 and it was opened through in 1901.

Permanent-way.—The permanent-way consists of 50-lb. flat-footed steel rails on steel pea-pod sleepers from mile 0 to 3 84 and 39 to 49½, except within station limits, on steel and wooden sleepers from mile 302 to 384 and on wooden sleepers for the remainder.

Ballast .- The line is ballasted throughout with stone, sand and moorum.

Fencing.—The line is fenced from mile 3771 to 381 and at all stations.

Curves .- The sharpest curve is of 1,483 feet radius.

Gradients.—The ruling gradient is 1 in 133.3.

#### Terms of contract-

The railway is worked under the following agreement :-

Agreement of.—16th March 1897 (between His Highness the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction and working.

The general conditions of the agreement are as follows:-

Terms of contract.—Capital to the extent of £2,500,000 to be raised by the issue of redeemable mortgage debentures, the Nizam's Government paying thereon an annuity, and, in addition, a sum of one per cent. per anum for 20 years towards a sinking fund for the redemption of such debentures which will be a first charge on the Hyderabad-Godavari Valley railway and a second charge on the Nizam's Guaranteed State railway; after the expiration of the guaranteed period the interest payable thereon to be a first charge on the net earnings of the former line and a second charge on the surplus net carnings of the latter line after the service of the existing debenture debt has been provided for. The free use of land is provided for.

Currency of contract.—On expiry of the contract by effluxion of time the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The contract runs concurrently with that of the Nizam's Guaranteed State Railways Company, and the Nizam's Government has the option of purchasing the line on the 1st January 1914, on twelve months' notice, by paying in sterling the capital unredeemed and a honus of 25 per cent. thereon, or on the 1st January 1934 or 1954 without honus. In case of breach of contract by the Company the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Power of Company to surrender contract .- Nil.

Thems of working.—From the gross carnings are deducted working expenses, and the net carnings are applied in the first instance towards replacing the amount paid as interest on capital during construction, and during the guaranteed period to repayment of the amounty paid in same half-year, and not more than half the residue to repayment of previous payments of annuity, the remaining moiety being added to and dealt with as part of the net carnings of the Company in respect of the Nizam's Guaranteed State railway. After expiration of the annuity a sum sufficient for payment of interest on the capital unredeemed to be retained by the Company, and of the balance one-half to be paid to the Nizam's Government the remaining moiety being dealt with as above.

Rates and fares .- Rates and fares not to be in excess of those prevailing on the Nizam's Guaranteed State railway,

## History of railways constructed and in progress. [For Index see page 112.]

Number Main head 8 Number (a) to (c) NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—condd.

8 (c) Hyderabad-Godavari Valley railway (3' 8}" gauge)-concld.

Statistics	of working-	-	
			T

													Таві	E 1.						TABL	a II.
		,				Caler	dar :	year.								Capital outlay to end of each year.	Gross carnings,	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1896 1897 1896 1899 1900	:	:	:	:	:	:	:	:	:	:	:	:	:	:		Rs. 3,74,350 17,64,352 86,55,416 2,00,21,97 2,31,94,817	Rs.  63,381 10,63,023	Ba.  36,877 4,20,826	  0·18 1·81	Bs.   48 70	 41.82 60.41
1901 1902 1908 1904 1905	: :	:	: :	:	• • • • • • • • • • • • • • • • • • • •	: :	: :	:	:	:	:	: ;;	:	:		2,44,37,419 2,57,75,220 2,62,07,241 2,64,85,096 2,68,15,349	20,10,033 22,88,043 22,14,752 22,11,781 29,64,122	9,23,300 9,67,892 8,86,291 7,74,804 13,29,009	3·77 3·76 8·38 2·93 4·96	99 112 109 109 146	54.07 57.70 59.98 64.97 55.16
1906	٠.		٠	٠							•	•			٠	2,69,36,746	30,32,503	14,21,747	5.29	149	53.12

Number Main hoad 9 . NORTH-WESTERN (STATE) RAILWAY SYSTEM-

Lines comprising the system.—The North Western (State) railway system is made up of-

		o	pen line.	Under con- struction or sanctioned for construc- tion.	Total.
			Miles.	Miles.	Miles.
(a) North Western (State) railway (5' 6" gauge)		-	3,371 71	268.94	3,640 65
(b) Amritsar-Patti railway (5' 6" gauge)			27.49	***	27.49
(c) Jamma and Kashmir (Native state section) (5' 6' gauge)			15.98	•••	15.98
(d) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)			78.65	•••	78·65
(e) Rajpura-Bhatinda railway (5' 6" gange)			107.05	•••	107.05
(f) Southern Punjab railway (5' 6" gauge)			425.33	•••	425.33
(a) Southern Punjab "Ludhiana" Extension railway (5' 6" gauge)		•	155.05	•••	155.05
(h) Khushalgarh-Kohat-Thal railway (2' 6" gauge)		•	91.78	•••	91.73
(i) Nowshera-Durgai railway (2' 6" gauge) (j) Dandot Light railway (2' 0" gauge)		•	40.25	•••	40·25 6·18
(1) Dandot Light railway (2 U gauge) (k) Jullundur-Kapurthalla-Sullanpur (British section) . ) Gaugo	* * * * * * * * * * * * * * * * * * *		6.18	6.80	6.80
(k) Jullundur-Kapurthalla-Sulfanpur (British section) . } Gaugo sottle		LMA	aliy 5	0.00	0 00
(l) Juliundur-Kapurthalla-Sultanpur (Native State section)	u,		₹	22.02	72.02
	Total	•	4,319.42	297.76	4,617:18
Running powers—					Miles.
One I am man foreign to an					Milles.
Home line over foreign line:— East Indian railway, Ghaziabad to Dolhi, for passenger and goods trains					. 18.00

#### 9 (a) North Western (State) railway proper (5' 6" gauge) -Details of construction-

The open mileage of the North Western (State) railway proper is 3,371.71 miles, of which 199.77 miles are doubte line. This may be divided into (1) the Coumercial section, main line (Ghaziabad to Peshawar and Lahore to Karachi), 1,444.70 miles, and branches, 802.69 miles; (2) Military section, Sind Sagar, main line (Lala Musa to Sher-Shah), 344.59 miles, and branches, 227.14 miles; (3) Military section, Sind Pishin (Ruk to Chaman), 336.03 miles; (4) Military section, Mushkaf-Bolun, main line (Sibi to Chetta), 86.74 miles, and branches, 35.74 miles; (5) Military section, Mushkaf-Bolun, main line (Sibi to Chetta), 86.74 miles, and branches, 35.74 miles; (5) Military section, Quetta-Nushki (Spezand Junction to Nushki), 83.04 miles; and (ii) Perhawor-Jamrood branch, 11.04 miles. first sanction to the main line of this railway was given in 1859. It was opened through to Peshawar in 1883 and from Lahore to Karachi in 1889.

There are 208'94 miles, single line, under construction and 204'15 miles of existing single line are in course of being doubled.

Permanent-way.-The permanent-way is of various types. On the single line, of iron rails there are 60-lb. flatfooted, 68-lb. double-headed, 60-lb. bull-headed, 82-lb. double-headed and 68-lb. bull-headed; of steel rails there are 70-lb. flat-footed, 62-lb. flat-footed, 75-lb. flat-footed, 64-lb. double-headed, 68-lb. double-headed, 75-lb. double-headed, 68-lb. bull-headed, 84-lb. bull-headed, 100-lb. flat-footed, 77½-lb. bull-headed, 73-lb. bull-headed and 85-lb. bull-headed. On the double line, of iron rails there are 68-lb. double-headed; of steel rails there are 68-lb. double-headed, 75-lb. flat-footed, 771-1b. bull-headed and 100-lb. flat-footed. The sleepers used are chiefly of wood, but cast-iron (oval or round) pots and steel transverse sleepers are also extensively used.

Ballast.—The line is ballasted throughout with sand, bricks and broken stone.

Fencing.—The line is fenced from Karachi to Lahore and from Lala Musa to Ghaziabad, also from Ruk to Jhatpat. The line between Lala Musa and Peshawar is partially fenced.

Ourves.—The sharpest curve is of 408 feet radius.

Gradients.—The ruling gradient between Kotri and Rohri, and Sibi and Ruk, is 1 in 500; between Ghaziabad and Lala Musa, and Kotri and Lahore, 1 in 400; between Karachi and Kotri, 1 in 189; and between Lala Musa and Peshawar, 1 in 100. The ruling gradients on the Sind-Sagar, Mari-Attock, Sind-Pishin and Mushkaf-Bolan lines are 1 in 400, 1 in 80, 1 in 40 and 1 in 25, respectively.

Terms of contracts-Nil. The line is owned and worked by the State.

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head 9}}{\text{Sub-heads }(a) \text{ to }(l)}$ . NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.

9 (a) North Western (State) railway proper (5' 6" gauge)—concld.

-				TAI	BLE I.	•									TAI	BJ-E	11.						
~	T	1				1	, un		1	1	· Sınd•	P	ınjab-	Γ,	ndus	[		1.	Nor	A B	estern	(State	r).
	Capital outlay	Gross	Not carmings.	ral outlay.	Interest.	Annuity,	said to Compo	Gum or loss to the		and	unjab   Dell.i, 5' 6".	Ne	rthein 'C".	Vail  Kai	y and dahar, 5'6".	Path	ritor- mukol '6".	1 0	ionmer	1 1	tilitary cetion.		Entire line.
Calendar year.	to end of each year.	earnings.	Cartubga.	Per echt, on capital		•	Surplus profits paid to Company	State.	Calendar year.	Larmings 1ct	Free of exp. th	Earning   Ter	Pro of txp:	Eareings p.r.	Provof cap:	Entraga per	Pror of exp:	Estates por	Pro . of exp :	Land the per	Pro: of exp.	Earnings per	Pro : of exp :
1879	Ra. 21,67,61,217	Rs. 1,51,27,62	R4. 55,30,470	2.55	Rs. 1,00,29,01	R	R+.	- 11,92,11		Re	•	1 Ra		Lin.		RH	<u> </u>	Rs		18 H	-,	Re	:
1860	25,05,35,401	1,00,30,06	75,55,661	3.02	1,11,56,91		21,12:	+36,02,39				1											
1881	. 26,39,29,396	90,04,72	46,13,547	1.73	1,17,64,80			-71,51,32	1869 1869	-	1 .	J		•				"				1	
1883	27,49,44,870	82,43,07	57,90,011	2 11	1,05,63,712			17,87,70	1865 1866	ì	1 82 15 0 76 15	1		-				.2.	!		1		
1883	. 29,19,15,806	1,03,41,14	87,19,24	3.00	1,07,43 931			20,24,68	1	1	1	1											***
1884	20,20,27,775	1,07,68,71	88,21,631	9 03	1,18,26,70)			30,05,07	1869	i	1	!				 					.		
1885	. 31,69,13,458	1,49,78,990	1,37,44,127	4 31	1,04,08,097	<b></b>	1,25,953	-29,80,52	1	,	76 16	¦					"						
1886	33,88,68,533	2,53,60,90	1,10,02,830	351	1,14,07,118	63,00.793		-47,15,04	1471 1472	12	2] 00 04 1 <sub>.</sub> 85 7″												
1687	30,10,49,700	2,10,03,38	57,77,586	1.60	1,01,56,775	84,30,323		-1 32,09,510	1673	ı	1	ļ											
1888	37,50,59,529	2,57,79,30	83,66,594	2 23	1,09,18,938	83 45,750	ļ	-1,08,95,09	1874	1	1	,	63:41						ł			-	<u> </u>
1889	39,78,09,431	2,52,06,82	1,02,81,71	266	1,13,76,516	83,98,768		91,90,51	1876 1877	18 24	67:03	1	1		٠				···				
1690	41,54,67,150		1,02,57,001		1,16,66,585	1		—88,63,30 <u>)</u>	1879	1	61 50	1	1	66	122:07								-
1891	41,87,30,071	ĺ	1,21,32,521		1,20,67,512	80,05,299	***	-79,40,32	1870 1850	313	1	310	1	121 209	81·16 71·15				! 				
1893	42,71,90,670	2,64,35,665	1		1,24,26,030	89,84,076		-1,10,50,110	1531	25		•	1	155	79 73								<del></del>
1893 .	13,71,03,581	2,92,68,732	1	2.90	1,27,61,692	90,98,543	***	-1,20,02,584 -99,97,343	1852 1953	250	1	151   141		203	65 55		•••		 	-	†	::	
1894	46,28,14,462	3,23,14,097	1,28,25,181		1,23,63,276 1,35,61,193		***	-73,71,580	1884	373	1	139	72.34	210	69.40	- 1	65.7R	٠					
1896		2,94,11,710		2.19	1,42,35,427	06, 13,598		-1,19,92,606	1886			165	62 69	30 <b>છ</b> 	40.82		 40.58					261	53.43
1897 .	1	8,29,03,149			1,45,10,298	99,95,191		-86,56,592	1587 1848			•••										182	
1898 .		3,70,01,912		3.70	1,50,11,150	58,85,840		51,02,948	1689		¦							200	50.73	£0	107:75		
1899 .	50,01,64,031	3,52,21,759		3 22	1,50,10,208	85,61,496		75,12,391	1891									283 344	64 95 55:80	68 89	133-41	1 1	62·36 62·98
1900 .	50,57,26,113	3,16,29,297	1,92,19,151	2.01	1,54,25,164	H5,70,683		-1,07,82,005	1892									260	84.99	70	131 08	1. 1	64.25
1901 .	51,04,27,448	4,11,89,277	2,03,56,471	3.00	1,55,50,694	80,02,222		-37,96,445	1893 1801									313	60°20 63°11	69 73	122·71 122·05	1. 1	60:58 60:81
1903 .	52,53,16,084	4,23,19,927	1,73,70,004	3-31	1,50,60,500	65,81,455		-71,80,021	1895 1896		1				- 1			- 1	46.79		116-11	274	53· <b>80</b>
1909 .	68,81,87,881	4,99,83,876	3,50,09,517	4.60	1,62,88,163	85,77,430		+1,42,961	1837								- 1	- 1	54·68 49·70	75 73	97°77 93°76	- 1	59·55 54·38
1904 .	54,52,89,823	6,18,56,310	3,22,02,009	5.02	67,34,700	85,77,430	]	+69,80,779	1898 1809						i		- 1	- 1	1		101·28 123·43		50.60
1905 .	57,60,84,021	6,86,74,918	1,90,52,383	6.04	,72,13,261	85,77,430		+32,61,602	1900						- 1		1	- 1	- 1	- 1	107:61	202	
1906 .	90,67,74,836	3,18,06,041	,93,40,919	4.84	,80,71,178	85,77,430	-	+26,93,311	1901						- 1		- 1	- 1	45·41 53·63	- 1		262	
		- 1	.			- 1		l	1903						1	1		431	14-43	65	106.04	294	40-30
		1			1	1		1	1904	:::		_					- 1	- 1	12·29 16·65		1	361 d	
									1908			-			<u> </u>			- 1	18-23	- 1	101-07	843	
																é					42		

# History of railways constructed and in progress. [For Index see page 112.]

Number  $\frac{\text{Main head 0}}{\text{Sub-hoads (a) to }(t)}$ . NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.

#### 9(1) Amritsar-Patti railway (5' 6" gauge)-

#### Details of construction -

This line, from Amritsar viá Tarn Taran to Patti, is 27.49 miles long. It was sanctioned in 1905 and opened in 1906.

Permanent-way.—The permanent-way consists of 60-lb. flat-footed steel rails laid on deodar sleepers.

Ballast .- The line has not been yet ballasted.

Fencing .- Station yards only are fenced.

Curves .- The sharpest curve is of 2,292 feet radius.

Gradients.—The ruling gradient is 1 in 400.

#### Terms of contracts-

The railway is worked under the following :-

Contract of-22nd March 1905 (between the Secretary of State and the Amritsar-Patti Railway Company) for working.

The general conditions of the contract are as follows :-

Government aid.—A rebate is allowed up to 45 per cent of the gross earnings from traffic (except the earnings derived from the carriage of stores) interchanged between the North Western railway and the Amritsar-Patti railway so as to make up an amount equal to interest for the year at a rate of 5 per cent, per annum on the actual capital expenditure plus Rs. 6,000 for each year for or towards the office expenses and the expenses of management and direction. Land provided free.

Currency of contract.—Government may, by giving 12 months' notice, determine the contract on 31st December 1935 or at the end of any subsequent period of 10 years paying the Company in rupess a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years but not exceeding by more than 20 per cent. the total capital expenditure of the Company nor being less than such capital expenditure.

Terms of working.—Government undertake to work and maintain the line and provide rolling stock at 45 per cent. of the gross earnings. When the net earnings of the Company in any year shall exceed the minimum amount sufficient to pay a dividend of 5 per cent. per annum such excess shall be applied towards the payment of office expenses and the expenses of management and direction up to a limit of Rs. 9,000 for such year and the balance, if any, shall be divided equally between Government and the Company.

Rates and fares.—Rates and fares to be fixed by Government within the maxima and minima rates and fares in force on the North Western railway.

#### Statistics of working.-

<u> </u>			TABLE I.			TABL	E II.
Calendar	r yoar.	 Capital expenditure to end of the year.	Gross curnings.	Net carnings.	Per cent. on oupstal outlay.	Earnings por mile por week.	Proportion of expenses to earnings.
· ·		Rs.	Rs.	Ra.		Rs.	
1906 .	•	 11,90,964	15,368	8,452	0.71	69	45.00

#### 9(c) Jammu and Kashmir (Native State section) (5' 6" gauge)-

### Details of construction-

This line, which extends from the Kashmir frontier to the left bank of the Tawi river near Jammu, is 15.98 miles long. Its construction was sanctioned in 1888 and it was opened in 1890.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfunced except at Sialkot station.

Curves .- The sharpest curve is of 2,865 feet radius.

Gradients. The ruling gradient is 1 in 500.

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 9 Sub-hoads (a) to (l). NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.

9(c) Jammu and Kashmir (Native State section) (5' 6" gauge)—concld.

#### Terms of contracts -

The railway is worked by the State under the following agreement :-

Agreement of—2nd February 1906, having effect from 1st January 1903, (between the Government of India and the Kashmir Durbar) for working.

The general conditions of the agreement are as follows :--

Government aid.—Government allow this railway, in addition to 44.5 per cent. of the gross earnings of the Tawi-Suchetgarh section, a rebate payment on interchanged traffic to the extent necessary to give the Durbar a total dividend of 3½ per cent. per annum on the actual expenditure to the end of the half-year concerned as entered in rupees in the capital account of the said railway—subject to a maximum limit equal to the net earnings of the North Western (State) railway from traffic interchanged with this section.

Currency of agreement.—The agreement is current for a period of five years from 1st January 1903 and is terminable thereafter on six months' notice by either side.

Terms of working.—The North Western (State) railway works and maintains the line for 55.5 per cent. of its gross carnings, which includes both hire of necessary locomotives and rolling stock and the cost, subject to a limit of Rs. 30 per mile per annum, of such new minor works as are usually charged to revenue on the North Western (State) railway. The cost of additional works usually charged to capital is to be found by the Durbar, no charge being made by the North Western (State) railway for supervision of the construction of such capital works except where special establishment is required.

Rates and fares.—Rates and fares are those which are from time to time in force on the main line of the North Western (State) railway.

#### Statistics of working-

							Т	ADLE I.				TABL	E II.
Cal	onda	ry	70Br.		Capital cutlay to end of each year.	Gross earnings.	Not carnings.	Per cent. on capital outlay.	Robate from North Wes- tern (State) railway.	Total income.	Percentage on total income.	Earnings per mile per week.	Proportion of expenses to earnings.
				-	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1888 1889 1890	:			$\cdot  $	29,545 7,51,458 12,37,071	 45,667	 13,770	 ïï11	 	· <b></b>	•••	) h	
1891 1892 1893 1894 1895	:				13,80,083 9,45,302 9,56,327 9,59,773 9,60,010	57,812 41,718 54,637 60,463 56,239	15,904 15,444 14,332 17,553 25,026	1.15 1.63 1.50 1.83 2.60				>Included w Western (	vith the North State) railway.
1896 1897 1898 1899 <b>1</b> 900	:		:		9,60,011 9,65,151 9,62,846 9,60,820 9,60,492	55,185 48,509 48,164 51,532 55,215	24,558 21,587 21,433 22,932 24,571	2·55 2·24 2·23 2·39 4 2·56	***		*** *** *** ***	58 62 67	55·50 55·50 55·50
1901 1902 1903 1904 1905	•				9,60,630 9,62,471 9,62,284 9,62,208 9,62,208	52,484 51,865 54,881 56,231 66,842	23,355 23,080 24,422 25,023 29,745	2·43 2·40 2·54 2·60 3·09	9,258 8,655 4,540	 33,680 33,678 34,235	3:50 3:50 3:50 8:57	63 63 66 68 80	85°50 55°50 <b>55°50</b> <b>55°50</b> 55°50
1906	•	•		.	9,78,566	77,688	34,571	8-58	681	35,255	8-60	93	55·50

#### 9(d) Ludhiana-Dhuri-Jakhal railway (5' 6' gauge)-

Details of construction-

This railway is 78.65 miles long. Its construction was sanctioned in 1899 and it was opened in 1901.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of crossoted pine and decdar.

Ballast.—The line is ballasted throughout with broken brick.

Fencing.—Only station yards and about 100 feet on each side of level crossings are fenced.

Curves.—The sharpest curve is of 1,384 feet radius.

Gradients.—The ruling gradient is 1 in 400.

# History of railways constructed and in progress. [For Index see Page 112.]

Number Sub-heads (a) to (l). NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.

9(d) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)-concld.

Terms of contract-

The railway is worked under the contract of 6th September 1899 (between the Secretary of State and the Maler-kotla and Jind Durbars) for construction and working.

The general conditions of the contract are as follows:-

Government aid .- Nil. The line was constructed at the cost of the Malerkotla and Jind Durbars.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year on six months' notice by either party. The contract may also be determined by the Secretary of State for breach of any of its provisions if they are not remedied within six months of being notified. Upon the determination of the contract the North Western (State) railway will give to the Malerkotla and Jind Durbars possession of the railway, works, surveys and stores, and, on this being done, the Malerkotla and Jind Durbars will indemnify the North Western (State) railway from all debts and liabilities incurred for the Ludhiana-Dhuri-Jakhal railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon.

Terms of working.—After deduction of 55 per cent. of the gross receipts for working expenses the balance is paid to the Malerkotla and Jind Durbars to be divided between them in the proportion of 5th and 5ths, respectively.

Rates and fares .- Rates and fares as in force on the North Western (State) railway.

Statistics of working-

	 			 	TABLE	1.			Таві	æ li.	
	Calc	ndar	year		Capital outlay to end of each year.	Стова сътнода,	Net carnings.	Per cent, on expital outlay.	Earnings per mile per week.	Proportion of oxpenses to earnings.	Remarks.
1901 1902 1903 1904 1905		•		 :	13,10,407 43,24,709 41,09,904 41,19,634 41,22,517 41,70,608	10., 2.02,297 4,0.,005 3,15,026 3,48 003 5,15,007 6,44 063	Re. 91,034 1,82,252 1,41,763 1,52,727 2,31,753 2,80,829	2·11 4·21 3·44 3·78 5·62 6·95	Rs. 68 99 77 85 126	55:00 55:00 55:00 55:00 55:00	The decrease in Capital outby in 1903 was due to credits.

## 9(e) Rajpura-Bhatinda railway (5' 6" gauge)---

## Details of construction-

This railway is 107.05 miles long. Its construction was first sanctioned in 1883 and it was opened through in 1889.

Permanent-way.—The line from Rajpura to Patiala is laid with 68-lb. bull-headed steel rails on deodar sleepers, and from Patiala to Bhatinda with 75-lb. flat-footed steel rails on crossoted pine and deodar sleepers.

Ballast.-The line is ballasted throughout with broken brick.

Fencing.—The line is fenced between Rajpura and Patiala at station yards, and 100 feet on each side of level crossings between Patiala and Bhatinda.

Curres.—The sharpest curve is of 1,146 feet radius.

Gradients.-The roling gradient is 1 in 500.

#### Terms of contract-

The railway is owned by the Patiala State and is worked by the North Western (State) railway under the following:—

Contract of—30th January 1893 (between the Secretary of State and the Patiala Durbar) for maintenance and working.

Government of India letter No. 817 R.T. of 5th October 1903, sanctioning the reduction in the percentage of gross carnings to be retained by the North Western (State) railway for working, from 55 to 52, with effect from 1st January 1904.

The general conditions of the contract are as follows :-

Government aid.-Nel. The line was constructed at the cost of the Patiala Durbar.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract the North Western (State) railway will give to the Patiala Durbar possession of the railway, works, surveys and stores, and, on this being done, the Patiala Durbar will indomnify the North Western (State) railway from all debts and liabilities incurred for the Rajpura-Bhatinda railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon.

Terms of working.—55 per cent. of the gross earnings to end of 1908 and 52 per cent. thereafter.

Rates and fares.—Rates and fares as in force on the North Western (State) railway.

History of railways constructed and in progress. [For Index see page 112]

Number  $\frac{\text{Main head}}{\text{Sub-ligatin (a) to (l)}}$ . NORTH WESTERN (STATE) RAILWAY SYSTEM—cont.l.

9(e) Rajpura-Bhatinda railway (5' 6" gauge)—concld.

Statistics of working-

											TA	HLE	I.				TAB	LE IL
				Cı	alon d	ar y	ear.			•			Capital outlay to end of each year.	Gross carnings,	Net carmugs.		Earnings per mile per week.	Proportion of expenses to carnings.
1881	•									•	•	-	Ra. 11,12,259	Rs. 5,111	Bs. - 196	***	Rs.	100.72
1885	•	٠	٠	•	•	•	•	•	•	•	•		12,29,111	48,709	<del>-1</del> ,255	} ···	50	106-09
1886 1887 1883 1880 1890	:	:	:	:	:	:	:	:	:	:	.•		12,29,141 12,43,250 22,41,996 62,83,918 65,06,331	64,623 Not availabl 1,04,480 5,66,946	o { 13,816 15,425 18,640 58,103 2,55,126	112 124 052 093 399	78   Included wit   orn (State)   74   101	78:63 h North West railway. 55:00
1891 1892 1893 1894 1895	:	:	:	:	:	•	:	:	:	:	:		65,81,553 66,41,682 67,26,941 67,01,669 67,02,457	7,19,859 5,64,053 6,54,447 12,59,632 13,18,002	3,23,937 2,53,534 3,97,956 5,66,565 5,93,506	492 383 458 545 866	128 100 122 224 235	55:00 15:00 56:00 55:00
1896 1897 1698 1699 190 <b>0</b>	:	:	:	:	:	:	:	:	:	:	:	•	66,95,813 66,96,151 67,04,510 67,95,785 67,95,785	9,97,526 6,96,927 7,02,607 6,79,520 6,93,594	4,19,692 3,13,617 3,16,187 3,05,784 3,12,211	6 71 4 63 4 72 4 56 4 66	173 121 125 122 125	55.00 55.00 55.00 55.00 55.00
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:	:	:	:	:	67,10,823 67,12,917 67,18,890 67,23 431 67,18,831	8,00,642 8,40,947 9,64,092 10,67,925 12,7,3,390	3,57,289 3,73,126 4,31801 5,12 604 <b>6,</b> 61,628	5:77 5:61 6:46 7:62 8:95	155 151 173 192 225	55:00 55:00 55:00 52:00 52:00
1906													68,02,550	11,97,174	5,69,825	8:37	213	52.00

9(/) Southern Funjab railway (5' 6" gauge)-

Chairman.—Sir Bradford Leslie, M.I.C.E., K.C.I.E. Secretary.—Urban Broughton, Esq.

Offices. - 70, Cornhill, London, E. C.

The railway runs from Delhi, ria Bhatinda, to Samasata on the North Western (State) railway, shortening the distance by railway between Delhi and Karachi by 187 miles as compared with the route vid Umballa and Lahore. Details of construction-

The mileage amounts to 425:33 miles, which may be divided into main line (Delhi to Samasata), 401:95 miles, and branch, 23-38 miles. The main line was opened through in 1897.

Permanent-way. - The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.-The line is ballasted throughout with broken brick.

Fencing .- Only the station yards are fenced.

Curres .- The sharpest curve is of 2,100 feet radius.

Gradients.—The ruling gradient is 1 in 400.

#### Terms of contracts-

The railway is worked under the following contracts:-

Contract of 13th August 1895 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working.

4th May 1899 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Narwana-Kaithal branch.

4th October 1905 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Southern Punjab "Ludhiana" extension, 9 (y).

The general conditions of the contracts are as follows:-

Government aid .- Government allow the Company in respect of each half-year, by way of relate on the net earnings of the North Western (State) tailway from traffic interchanged with the Southern Punjab railway and from through traffic between stations of the North Western (State) railway sent over the Southern Punjab railway, such a sum (not exceeding the amount of such net carnings of the North Western (State) railway) as together with the Company's net carnings make up an amount equal to interest for the year at the rate of 31 per cent on the actual rupee expenditure charged in the capital

account. Land was provided free of cost to the Company.

Currency of contract.—Government may, by giving twelve months' notice, determine the contract on the 31st December 1923, or at the expiration of any subsequent period of ten years, paying to the Company in sterling a sum equal to 25 times the average of the Company's share of the net earnings of the railway during the last preceding five years, not exceeding by more than 20 per cent, the total capital expenditure of the Company in sterling nor being less than such capital expenditure. Government may also determine the contract on the 31st December 1948, paying to the Company in sterling a sum equal to the total capital expenditure in sterling.

Power of Company to surrender contract .- Nil.

## History of railways constructed and in progress. [For Index see page 112.]

Number Main head 9 Sub-head (a) to (l). NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.

9(f) Southern Punjab railway (5' 6" gauge)—concld.

Terms of contracts-conold.

Terms of working.—Government undertake to work and maintain the line and provide rolling-stock at 52 per cent. of the gross earnings. Surplus profits in excess of 3\frac{3}{2} per cent, per annum on the total capital expenditure in sterling are divisible equally at the close of each year between the Government and the Company. The North Western (State) railway take all receipts from traffic between its own stations including Delhi and Samasata, but excluding the Patiala State railway. which passes over the Southern Punjab railway. The Compuny, in addition to its carnings from local and interchanged traffic, receives, where it forms part of the shortest route, its mileage proportion of traffic between the North Western (State) railway and foreign lines.

Rates and fares .- Rates and fares are fixed by Government within the maxima and minima rates and fares

in force on the North Western (State) railway.

Statistics of working-

,					Tabi.	e I.			•	TA	BLB II.	
Calend	lar y	ear.	Capital outlay to end of each year.	Gross eacuings,	Not carnings.	Percentage on capital outlay.	Rebate from N. W. (S.)	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week	Proportion of expenses to earnings.	
			Rs.	Rs.	Rø.		Re.	$\mathbf{R}_{\mathbf{g}}$		Rs.		Adjustments under
1895	•	•	21,19,111					•••		•••		the Cripps' award
1896 1897 1898 1899 1900	:		1,30,67,048 1,99,68,312 2,23,62,921 2,26,68,262 2,26,57,963	1,61,038 16,29,122 16,11,010 16,36,289	77,298 7,81,976 7,73,285 7,89,360	0.39 3.49 3.41 3.48	19,942 17,314 9,562	97,349 7,81,978 7,90,663 7,92,922	0:49 3:19 3:49 3:50	52 74 73 74	52.00 52.00 52.00 52.00	were brought into account in 1901, but in these shuta- ties they have been adjusted and allo- cated to the proper
1901 1902 1903 1904 1905	:	:	2,25,70,734 2,27,93,660 2,28,27,906 2,29,43,454 2,30,13,696 2,31,30,148	24,96,333 19,41,541 21,59,158 27,47,442 26,40,372 41,67,059	11.98,240 9,31,940 10,86,396 18,18,772 17,47,379 20,00,188	5/31 4/09 4/5/4 5/74 7/5/9	  	11,98,240 9,31,940 10,36,396 13,18,772 17,47,379	5:31 4:09 4:54 5:74 7:59	113 88 98 124 165	52:00 52:00 52:00 52:00 52:00 52:00	yoars.

#### 9(a) Southern Punjab "Ludhiana" extension (5' 6" gauge)-

Details of construction -

The open mileage, from Ludhiana, vid Ferozepore, to McLeod Ganj is 155.05 miles. This extension was sanctioned in 1903 and opened through in 1906.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on Australian jarrah wood sleepers.

Bullast.—The line is being ballasted chiefly with brick.

Fencing.—Only station yards, and short lengths on either side of all level crossings where gates and gate lodges have been provided, are being fenced.

Curves .- The sharpest curve is of 1,910 feet radius.

Gradients.-The ruling gradient is 1 in 400.

#### Terms of cofftract-

This railway is worked as a part of the Southern Punjab railway under the contracts and conditions relating to that

railway [9 (f)], except as follows:-

Government aid .-- Government allow the Company, by way of rebate on the net carnings of the North Western (State) railway from traffic interchanged or sent over any part of the Company's lines including the Ludhiana extension, such a sum (not exceeding the amount of such net earnings of the North Western (State) railway) as together with the net earnings of the Company in respect of the Ludbiana extension will make up interest at the rate of 5 per cent. per annum on the capital expenditure of the Company in respect of the extension as charged in the capital account.

Currency of contract.—Concurrent with the contract contained in the Principal Indonture. If determined by notice of purchase on 31st December 1923, or at the expiration of any subsequent period of ten years, there shall be paid to the Company a sum equal to twenty-five years' purchase of the average of the Company's share of the net earnings of the extension during the five years immediately preceding such 31st December, subject to a maximum limit of 20 per cent. of the total capital expenditure on the extension and a minimum of the total sterling capital expenditure of the extension; if determined by notice of purchase on 31st December 1948 then the total amount of such capital expenditure as aforesaid in sterling.

Terms of working .- Surplus profits in excess of 5 per cent. per annum on the total capital expenditure are divisible at the close of each year between the Company and the Secretary of State in the proportion of one-fourth to the former and three-fourths to the latter.

							TABLE 1	ι.				TAB	le II.
Cul	lond	ar	Jea:	r.	Capital outlay to ond of each your.	Gross carnings.	Not earnings.	Per cont. on capital outlay.	Rebate from North Western (State) railway.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
******					Re.	Ra.	Ra.		Ba.	Be.		Re.	
1905 1906	:		:	:	70,09,669 79,33,781	78,332 6,20,557	35,200 3,02,187	0·50 3·81	10,500 33,818	45,700 8,85,505	0·65 4· <b>3</b> 8	68 83	<b>52-00</b> <b>52-00</b>

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 9 Sub-heads (a) to (b). NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.

9(1) Khushalgarh-Kohat-Thal railway (2' 6" gauge)-

Details of construction-

The line is 91.73 miles long. Its construction was sanctioned in 1900 and it was opened through in 1903.

Permanent-way.—The permanent-way between Khushalgarh and Kohat consists of flat-footed steel rails, 35 lbs. to the yard, laid on wooden sleepers; the Kohat-Thal section is laid partly with 25-lb. and partly with 21-lb. rails, partly on wooden and partly on steel sleepers.

Ballast .- The line is ballasted throughout with broken stone.

Fencing .- The line is unfonced.

Curves .- The sharpest curve is of 239 feet radius.

Gradients.—The ruling gradient between Khushalgarh and Kohat is 1 in 83.3 and between Kohat and Thal 1 in 100.

Terms of contract.—The line is owned and worked by the State.

Statistics of working-

		TABLE II.	
TAULE I.	Calcadur year.	Earnings por mile per week.	Proportion of expenses to earnings.
Included with the North Western (State) railway	1902 1903 1904 1905 1906	Rs. 31 35 84 38 50	67-88 174-56 222-38 166-36 143-68

#### 9(i) Nowshera-Durgai railway (2' 6" gauge)-

Details of construction-

This railway is 40°25 miles in length. Its construction was sanctioned in 1899 and it was opened through in 1901.

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails laid partly on wooden and partly on steel sleepers.

Ballast .- The line is ballasted throughout with broken stone.

Fencing .- The line is unfenced.

Curves .- The sharpest curve has a radius of 477 feet.

\* Gradients.-The ruling gradient is 1 in 100.

Terms of contract.—The railway is owned and worked by the State.

Statistics of working-

		 							TABLE II.	
Table I.		 						Calendar year,	Earnings per mile per week.	Proportion of expenses to earnings.
Included with the North Western (State) railway	•	•	•	•	•	•	 -{	1902 1903 1904 1905 1906	Ra. 51 53 69 68 72	152:27 101:67 97:29 103:17 92:46

## 9(j) Dandot Light railway (2' 0" gauge)-

The Dandot Light railway has been constructed by the North Western (State) railway to develop the Dandot colliery, which is worked primarily for the benefit of the railway. The section from Dandot to the mouth of the main mine consists chiefly of two inclines worked with steel wire ropes by combined gravity and steam power. On the second portion (1.29 miles) there is another incline worked by gravity alone.

#### Details of construction-

The line is 6.18 miles long. The section from Dandot station to the mouth of the main mine was opened in 1889.

Permanent-way.—The permanent-way consists of old metre gauge 36-lb. and 40-lb. rails laid on decdar sleepers.

Ballast.-The line is ballasted throughout with broken stone.

Fencing .- The line is unfenced.

Curves .- One semi-circular curve of a radius of 75 feet is used to enable the line to turn on itself.

Terms of contract.—The line is owned and worked by the State.

Statistics of working .- Included with the North Western (State) railway.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main hoad 9 Sub-heads (a) to (\vec{l}) . NORTH WESTERN (STATE) RAILWAY SYSTEM—conclid.

#### 9(k) Jullundur-Kapurthalla-Sultanpur (British section)-

This line, which will be 6.80 miles long, has not yet been commenced, nor has the gauge been settled.

## 9(1) Jullundur-Kapurthalla-Sultanpur (Native State section)-

The Native State section will be 22.02 miles long. The same romarks apply to this as are made against the British section.

# Number Main head 10 sub-heads and to (c). OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—

Lines comprising the system.—The Oudh and Robilkhand (State) railway system is made up of-

									e	•		Open line.	or sanctioned for construc- tion.	Totul.
(a) Oudh and Robikhan I (State) rad	wa <b>y</b> { (	5/ 67 31 341	gange) ' gang,	·) .	:	:	:	:	:	:	:	Miles. 1,210:75 1 81	M·lo∗. 99·15	Miles. (1,309 90 1/81
(b) Hardwar-Dehra tailway (5' b" gar							•		•		•	:12 01	***	32.01
(c) Cawnpore-Burhwal link (3' 3, gar	age)	•		•	•	•	٠	•	•	•	•	79 60	***	79.60
			•						Т	otal		1,224 20	99 15	1,428.35
Running powers—													-	Miles.
Home line over Foreign line:  Chazinbad to Della, East India Foreign times over Home line:  Great Indian Poninsala tailway East Indian railway, Mogdell Sa	rat Cav	anpo ore to	ro Luck	j (woa	g <b>r</b> ant	fed fo	r pas	s-en;;	er and	Lgoo	ds fr	sins, but exer	ermer only	. 13:00 13.7. { 0.86 14:63 10:00
Bengal and North-Western rate		kori Setar		ntonn								o Barhwal ) f	or passonger and goo	75·49 79·60

# 10(a) Oudh and Rohilkhand (State) railway proper (5' 6" gauge)-

The Oudh and Robilkhand railway was acquired by the State from the late Guaranteed Company on the 1st January 1889.

A tramway constructed at the expense of Messrs. Chew and Company connects the Rosa Sugar factory with Rosa station on the Oudh and R hilkhand (State) railway. This tramway is 3:25 miles long and is worked by manual power. It is used for goods traffic only.

#### Details of construction.

The total open mileage of the railway is 1.212.56 miles. This may be divided into (1) Main line (Moghal Sarai to Saharanpur), 518-19 miles; (2) Benares-Lucknow loop, 19903 miles; (3) Bareilly-Moradaba 1 loop, 70.50 miles; and branches, 422-73 miles; and 1.81 miles of 3' 3\frac{3}{3}'' gauge at Benares.

First sanction to construction was given in 1864. The main line vid Rai Baroilly was opened through in 1898. The Benares-Lucknew loop was opened through in 1874 and the Baroilly-Moradabad loop in 1873.

There were 10:07 miles under construction, and SS 18 miles sanctioned but not commenced.

Permanent-may — The main line and Benares-Lucknow loop are laid throughout with 75-lb. flat-footed steel rails. So are most of the brunches, although some 60-lb. flat-footed steel rails are still to be found in a few of the branches, e.g., the Aligarh branch and in a pertion of the Barvilly-Moradabad loop. There are also a few miles of 60-lb. flat-footed iron rails in the Bahranghat and Madhoganj branches.

The sleepers are of the following types:—stamped steel bowls, east-iron pots, steel trough transverse and wood (sål, deodar, jarrah and New South Wales hard wood). There are a few wrought iron saddle back sleepers in the Kotdwara branch and Bareilly-Moradabad loop.

Ballast .- The main line is ballasted throughout with kunkur, stone, or shingle.

The branches are ballasted either with sand or earth with a covering of broken brick, kunkur or stone, except the Allahabad, Delhi, Cawapore and Hardwar branches which are ballasted with kunkur, stone or shingle.

Fencing .- The line is fenced throughout with the exception of the Madhoganj, Meerut and Kotdwara branches.

Curves .- The sharpest curve on the line is of 1,000 feet radius.

Gradients .- The ruling gradient of the whole of the railway is 1 in 400.

## Terms of contract-

Nil. The railway is owned and worked by the State.

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 10 Sub-heads (a) to (c)

OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM-contd.

10 (a) Oudh and Rohilkhand (State) railway proper (5' 6" gauge)—concld.

Statistics of working-

	Caloudar year,			T.	въи 1.					TAB	LM II.					
		Calor	odar	year.				Capital outlay to end of each year.	Gross carnings.	Net carnings.	Per cent, on capital outlay.	Interest.	Surplus profits paid to Company.	Claim or loss to the State.	per mile	Proportion of expenses to earnings.
					-			Ra,	R	Tis.		Rs.	Rs.	Ra.	R⊲,	
1867										.,		•,•		•1•	74	106-97
1868							•		,				·		120	64.54
869	•		•	•	•	•	•		. 1	•••		•••	•	•••	97	81.74
1870 1871	:	•	•		•	•	•		. ]			···	•••	•••	112 117	227-93 69-31
	:	•	:	÷	:	:				•••			:::		56	68.28
	:	:	•		·	÷			1	***					56	72.91
1874								,					-		72	64.41
1875			•	•	•	•	•			•					97	39.71
1876			•	•	•	•	•			•••					120	63.33
1877				_											153	52:88
1678	:	•		·	•	•					:::		2		163	54.28
									1		ĺ	•		ŀ		
$1879 \\ 1880$	:	:	:	:	:	:	:	5 80,35,77 <b>4</b> 6,02,21,081	40,13,543 41, 7,150	18,19,936 19,01 <b>,4</b> 09	3 1 1 2·16	28,00,000 25,12,546	:::	-9,80,064 -9,15,537	158 157	58·11 57·2 <b>5</b>
1541	_							6,25,00,005	49, 18,750	19,75,699	3.16	29,14,137		- 9,38 138	173	59.91
18-2								6,52,70,830	49, 3,750 5, 29,514	18 01 37 i	2.76	30,67,622	!	-12,66,251	185	65.77
1783						•		7,07,69,446	at 56 to 1	24,80,362	3 50	31,25,495		-6,55,133	192	24.24
			•	•	•	•		7,51.13,383	52,75,108	23,56,146	2.91	41,11,587		-17.88,411	182	55.99
1885	٠	•	•	•	٠	•	•	8,73,31,426	Log Hyrod	17,95,361	2 10	46,53,333	,	-28,57,972	176	65.50
18-6		_						8,95,12,775	65,05,103	28,00,755	3:25	51,59,014		- 23,27,259	180	56.02
1 1 7			•	•	,	•		9,17,06,668	66,16,313	31,75,219	3.12	53,98,009		-22,63,690	186	52.83
1.48								9,18 11,649	70,7 053	30,16,605	3 28	51,67,194		- 21,51,49	197	57:38
1.359				•	•	٠	•	9 22 32,236	75,20,583	12,04,076	4 56	19,71,598		-7,67,822	209	44.24
1890	•	• •	•	•	•	•	•	9,27,89,180	73,81,396	37,51,47	4.05	44,23,109		-6,68,631	205	49.14
18.11				_				9,28,38,318	85,64,200	49,42,458	5:02	47,25,660	1	+ 2.16,793	238	42.29
1892	•	:	÷	:	•	:	÷	10,34,95,685	85,42,836	50,16,3.9	4.81	52,79,111	:::	-2,63,082	237	41-28
1893								10,09,17,292	87,15,926	50,17,053	4:97	55,01,058		-4.84.005	239	42.44
1891		•	•	•	٠	•	•	10.04 7.184	1,00,15,00	57,36,138	5.58	£3,11,123		- 5,71,945	262	45.47
1855	٠	•	•	٠	•	•	•	10,65,65,118	1,02,04,550	52,55,048	4 93	63,69,919		-11,14,001	248	48.95
1396								10,92,69,495	80,97,076	43,56,507	3:95	61,30,729		-17,79,822	200	49.97
1897		·						11,11,19,29	85,15,556	20,96,273	3 23	1.9.77, 186		- 22,80 708	186	56.59
1898					•			11,64,99,214	98,51,700	10,00,7.7	4.56	58,76,317		-5,69,520	196	46-12
	•	•	•	:	•	•		12,21,81,123	1,11,35,950	60,76,495	4:17	1 59,75,292		+1,01,393		48.45
1000	•	٠	•	•	•	٠	•	12,55,91,869	1,15,15,132	56,31,727	4:15	62,24,185		-6,36,458	208	51.44
1901			_					12.8 : 66,865	1,32,54,991	72,20,607	5.60	63,12,014	1	+9,07,963	231	45.53
	:	:		÷	:	÷	:	13.65, 17.057	1.31.65.792	01,11,526	4.70	64,75,905	:::	- 61,569		51.80
1903	:							14.52,62,379	1,39.19,523	79,31,902	4::8	68,00,305		+ 4,31,557	226	48-16
1904				•		•		11,97,63,924	1,5196 266	71,33 117	4.76	70 55,640		+77.177		53.87
1905	٠	٠	•	•	•	•	•	15,37 92 909	1,58 85,913	63,43,667	4.13	71,68,431		- 8,24,764	238	58.77
1906								15,71 99 731	1,64,67 329	78,15,731	4.97	75,66,010		+2,49,721	249	52-54
1000	•	•	•	•	•	•	•	100 101	Calustin One	16,10,101	9 91	10,00,010	1	1 2,10,102	1 40	02.04

## 10 (6) Hardwar-Dehra railway (5' 6" gauge) -

## Details of construction-

This railway is 32:01 miles long. Its construction was sanctioned in 1898 and it was opened in 1900.

Permanent-way.—The permanent-way consists of 75-lb, flat-footed I. S. R. steel rails on deodar and sal sleepers.

Ballast.-The line is ballasted throughout with shingle, with a covering of broken stone for boxing.

Fencing .- The line is fenced throughout.

Curves.-There are no curves with a radius of less than 1,000 feet.

Gradients .- The ruling gradient is 1 in 75.

#### Terms of contract-

The Hardwar-Dehra railway is worked under the following contract :-

Contract of -26th March 1897 (between the Scoretary of State and the Hardwar-Dehra Railway Company) for construction and working.

The general conditions of the contract are as follows :-

Government aid.—Interest at 3 per cent. per annum is guaranteed. Government also allow Rs. 3,600 for office and management expenses in any year in which the minimum dividend of 3 per cent. is not received by the Company from the earnings of the line, and pay all legal expenses properly debitable to revenue. Land is also provided free of charge.

Terms of contract.—The Hardwar-Dehra Railway Company is authorised to raise 30 lakhs of rupees as capital and, except for bond fide temporary purposes at a reasonable rate of interest, the Company cannot, without the sanction of Government or the working agency, increase its share or stock capital.

Currency of contract.—Government may determine the contract, on twelve months' notice either on the 31st December 1910 or at the expiration of any subsequent period of ten years, by paying a sum equal to 25 times the average yearly net earnings during the three years prior to determination, provided the payment does not exceed by more than 20 per cent., or is not less than, the total capital expenditure.

Power of Company to surrender contract .- Nil.

# 168

#### APPENDIX 38-contd.

History of railways constructed and in progress. [For Index see page 112.]

Number Sub-heads (a) to (c). OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—concld.

10 (b) Hardwar-Dehra railway (5' 6" gauge)-concld. Terms of contract-concld.

Terms of working.—After deduction of 50 per cent. of the gross carnings for working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) and repayment to Government of the interest paid by Government under the contract and attributable to each half-year, the residue, if any, at the end of the year to be divided in equal proportions between the Government and the Company.

Rates and fares .- Rates and fares to be arranged between Government and the working agency within one-andhalf times the maximum and minimum rates and fares in force on the Oudh and Rohilkhand (State) railway.

#### Statistics of working-

					TABLE	e I,		1		TAB	LE 11.	
Calend	dar ;	year	Caj ital ontlay to end of onch year,	Gross carns	Not carnings.	Per cent. on e quital outlay.	Inforest	Company's share of not carnings	Gain or loss to the State.	Earnings per mile per week,	Preportion of exponses to earnings.	Remares.
1897 1898 1899 1900 1001 1902 1908 1904 1905 *1906	:		Rs. 1,96,617 10,70,045 28,42,687 25,67,003 28,12,01 28,06,4-6 28,14,612 29,12,002 29,20,650 20,24,284	Rs.  1,60,485 2,13,456 2,52,485 2,62,710 2,63,676 3,13,476 3,34,110	Rs 80,249 1,06,798 1,96,042 1,31,000 1,01806 1,79,738 1,67,055	3 50 4 45 4 62 4 52 5 37 6 71	Rs	Rs.    11,532 29,597 20,000 22,013	R:	Rs	50-60 50-60 50-00 50-00 50-00 50-00	Interest up to 1900 was charged to capital and not carnings of 1900 were credited to capital in reduction of interest charges.

## 10 (c) Cawnpore-Burhwal (3' 33" gauge) link-

The construction of the Camppore-Burhwal (3' 33" gauge) link was sanctioned as a part of the project for linking up the 3' 3 gauge systems of Northern India.

#### Details of construction-

The link is 79:60 miles long. Its construction was sanctioned in 1894 and it was opened through in 1897.

Permanent-way.—Where the line is not mixed gauge it is laid with new 50-lb. steel rails on decdar sleepers.

Ballast.—The line is ballasted throughout with Lunkur, stone, or shingle.

Fencing .- The line is fenced throughout,

Curves.—The sharpest curve has a radius of 573 feet.

Gradients.—The ruling gradient is 1 in 400.

#### Terms of contract-

The line is owned by the State. The Bengal and North-Western Railway Company exercises running powers over it under an agreement with the Oudh and Rehilkhand (State) railway, dated the 21st February 1902, which provides that the Company will haul its trains and traffic over the link and pay to the Oudh and Rohilkhand (State) railway 80 per cent., which has, with effect from the 1st July 1905, been reduced to 75 per cent., of the gross receipts arising therefrom.

#### Statistics of working-

Included with the Oudh and Rohilkhand (State) railway [10 (a)].

Number—Main head 11 · ASSAM-BENGAL RAILWAY (3' 33" gauge)—

Chairman .- Lieuteuant General Sir Richard Strachey, R.E., G.C.S.I.

Managing Director .- James Mendows Rendel, Esq.

Offices. - Bishopsgate House, Bishopgate Street within London, E. C.

The construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was formed in England in April 1892 and took over the works commenced by the State. The late Noakhali (Bengal) railway, 34-90 miles which was worked by the Assam-Bengal Railway Company up to the end of 1905, was purchased by Government and amalgamated with the Assam-Bengal railway from the 1st January 1906.

## Details of construction-

The total open mileage of the line is 775.28 miles, which may be divided into (1) main line (Chittagong to Tinsukia), 576.61 miles, and (2) branches, 195.67 miles. The main line was opened through to Tinsukia in 1903.

Besides the above 35 miles were sanctioned for construction, of which 19 miles are actually under construction.

Permanent-way. The line is laid with 50-lb. flat-forted steel rails, partly on sal and pyinkado, and partly on bastard sel, nageshur and jarrah wood sleepers. The Neakhali branch is laid with 41 1 lb steel tails on sal sleepers.

Ballast.—The ballast consists of broken brick, stone and laterite. The whole line has not yet been ballasted.

Fencing.—The line is fenced between Chittagong Port and Silchar, Laksam and Chandpur, Gauhati Ghat and Gauhati, and half a mile from Gauhati towards Lumding, and at some statious on the hill section.

# History of railways constructed and in progress. [For Index see page 112.]

Number Sub

Sub-head (a)

ASSAM-BENGAL BAILWAY (3' 31" gauge) -contd.

Details of construction-concld.

Curves .-- The sharpest curve is of 358 feet radius.

Gradients.—The ruling gradient between Chittagong and Badarpur is 1 in 150; between Badarpur and Lumding 1 in 60, with a 1 in 37 banking section 8.51 miles long; between Gauhati and Tinsukia, 1 in 100; between Laksam and Noakhali, 1 in 200; between Laksam and Chandpur, 1 in 300; between Badarpur and Silehar, 1 in 150.

#### Terms of contracts-

The Assam-Bengal railway is worked under the following contracts :--

Contracts of -26th April 1892 (between the Secretary of State and the Assam-Bengal Railway Company) for construction and working.

—11th April 1906 (between the Secretary of State and the Assam-Bengal Railway Company)—supplemental to the contract of the 26th April 1892—for the acquisition by the Company of the Noakhali (Bengal) railway for the purpose, and as a part, of their undertaking, and for the application thereto, as from 1st January 1906, of the provisious of the principal contract of the 26th April 1892.

The general conditions of the contract are :--

Government aid.—Government guarantee interest in sterling at 3 per cent. on the Company's share capital of £1,500,000. Up to 30th June 1898 interest was allowed at 3½ per cent. Land was provided free of charge.

Terms of contract.—The contract provides that the Company raises £1,500,000, and that any further money required be supplied either by the Government or raised by the Company under guarantee. Subject to the provisions of the contract, all land and everything constructed or to be constructed thereoff, and generally all property, whether real or personal, (with the exception of monies paid against interest on the Company's share capital and sums applied from net earnings) are the property of Government, but are subject to use and enjoyment by the Company during the continuance of the contract.

Currency of contract.—Government may determine the contract, by giving the Company in England 12 months' previous notice, on the 31st December 1921 or at the end of any succeeding 10th year. Government may also determine the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or the line is worked at a loss for not less than three half-years consecutively. On the determination of the contract the Company is to hand over to Government the railway and all its belongings of every description, on repayment of the amount of the par value of the share capital paid by the Company to Government.

Power of Company to surrender contract.-Nil.

Terms of working.—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net earnings to be applied in payment of—

- (1) Contribution due to the Provident Fund, calculated at one per cent. of net earnings.
- (2) The equivalent in rupees of interest paid on debenture capital; provided that if the Company's share capital is not less than is the total capital expenditure, the rate of interest recovered under this sub-head (on debentures issued previous to the 30th June 1893) shall not exceed the rate for the time being applicable to the Company's share capital.
- (3) The equivalent in rupees of guaranteed interest paid to the Company in respect of share capital; interest on the capital contributed or deemed to be contributed by Government, at the same rate as the guarantee for the time being on the Company's capital. But if the Government capital exceeds in the total capital expenditure for the time being, the rate of interest on the amount of the excess to be subject to agreement; and the residue is divisible between Government and the Company in the ratio of their respective capital expenditure.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

										TABLE	τ.					ТАВ	LE II.
"		NA.		enda	r yeai	r.				Capital outlay to end of each year.	Gross earnings.	Net carnings.	Per out. on oxpital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
									`	Rs.	Rs.	Rs.		-	Rs.	Rs.	
1891 <b>1892</b>	:	:	:	:	:	:	:	:	:1	1,53,203 80,16,133		:::		35,898 2,66,378	-5,893 -2,66,378	:::	
1898	•			•					- 1	1,07,68,192			•••	7,09,987	7,00,987		
1894	٠	٠	•	•	•	•	٠	•		2,46,89,898 4,04,38,298	2,14,426	-8,047		8,76,954 13,95,686	-8,76,954 -14,03,688	,,	183.75
1895	•	•	•	•	•	•	٠	•		4,04,30,290	2,14,420	0,047	- 1980	13,00,000	-14,00,000	64	183'75
1896										5,21,89,804	6,18,785	33,238	0-06	23,73,034	- 23,89,796	71	94.63
1897	•									6,87,67,401	9,90,640	72,214	0.11	22,56,279	-21,84,005	68	92.71
1898	•	٠	•	•	•	•	•		.	7,56,41,721	13,06124	54,551	<b>₩</b> '07	24,45,275	23,90,721	86	95.83
1899	•	•	•			´ •		•	- 1	8,69,56,286	16,18,646	9,22,704	0.37	28,67,084	-25,40,880	75	80.08
1900	•	•	•	•	٠	•	•	٠	• 1	9,56,01,772	17,09,953	3,64,964	0.38	83,31,990	<b>—29,67,026</b>	75	78-69
1001									- 1	10.41.49.467	21,34,252	4,56,654	0.44	35,06,252	-30,49,598	70	78-60
1902	•	•	•	•	•	• •	•	•	:1	14,11,34,922	20,96,058	2,54,418	0.23	98,08,887	-35,58,969	68	87.86
1901 1902 1908 2904	:	•	:	:	•	•	:	:	:1	12,40,28,549	23,97,658	4,48,963	0.86	40.71,450	-36,27,487	72	80.21
7904	•	- 5	•	•	• •	•	•	:	- : 1	12,60,09,689	29,58,962	1,05,390	800	41,66,585	-40,61,145	77	94-78
1905	÷		•	·	·	:	:	:	1	12,78,57,542	84,14,295	1,25,615	0.10	43,61,306	-41,35,691	88	94.68
									1		1, 1						
1906				•		•			. }	18,25,20,704	42,20,064	4,27,858	0.32	44,58,917	-40,26,059	104	89.86

History of railways constructed and in progress. [ For Index see page 112.]

Main hand 11 Sub-hond (a) . ASSAM-BENGAL RAILWAY (3' 38" gauge)—concld.

Statistics of working -concld.

Noakhalı (Bengal) railway (3' 3\\ gauge)—

		TAULE 1.			TABL	e II.
Calendar year. Cipital outling to cale of each year		Net   Per cent   on cepita   outley.	Rebut : from A sur- Ben_al rail- way	Por cent. of total meome on capital outlay.	Larnings per mile per week.	Proportion of expenses to earnings.
1903	55,819 68 193	Rs. 2,409 0 0 0 1.566 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 50,775 47,543 50,000 57,721	2.50	Ея. 30 31 33	92 00 105:79 97:57

Number Main head 12 Sub-heads (a) & (b). BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—

Chairman .- Colonel T. Gracey, R.E., C.S.I.

Managing Director .- Alexander Lat, Esq., C.I.E., M. Inst. C. E.

Offices .- 237, Gresham House, Old Broad Street, London, E. C.

Lines comprising the system-The Bengal and North-Western railway system is made up of-

					(	)pruline.	buder construction, or suctioned for construc-	Total.
(a) Pongal on I North-Western rulway (3' 3' (b) Tirhoot railway (3' 3\' gou; 0)	. <b>"</b> inp	:	:	:	:	Miles. 95213 61470	tion, Miles, 142-16 154-06	Miles, 1,071 64 778 36
			Tot	13		1 516 48	306 52	1,853 00

#### Running powers-

Home line over Forcen, hat-

Cownpore to Arshbach, Cran, re-Burkwal (V.S., ganze) link, Oudh and Bohilkhand (State) rulway Anchbagh to Dalus mg Tucknow-Barchty rulway Dalu, on to Burhwal, Cawaquo e Brita. d. (v. 5), V. 100 Jink, Oudh and Cohilkhand (State) rulway Ben iros Cantonnerd to Benaris City, Oudh and Robalkhand (State) rulway 15 03 3 10 goods trains Total

## 12 (a) Bengal and North-Western railway proper (3' 33" gauge)-Details of construction-

The total open mileage of the railway is 932:18 miles.

This may be divided into (1) main line (Sonepore to Aj dhya) 237'09 miles; (2) loop line (Sonepore to Bunwarchak) 9:34 miles; and (3) branches, 685'75 miles. The construction of the main line was sanctioned in 1882 and it was opened through in 1885.

Besides the above there were \$2.67 miles under construction, viz., Dharonda to Maharajganj. 3:90 miles, Gorakhpur to Bagaha, 60 94 miles, and Savan to Thawe, 17:83 miles; and 59 79 miles, Barhwal to Sitapur, sanctioned for construction but not commenced.

Permanent-way. - The main line between Sonepore and Burhwal is laid with 50-lb. steel rails on sal sleepers. The rest of the line north of the Gogra is laid with 11}-lb. steel rails mostly on sal sleepers. The Ganges-Gegra Doab lines are laid with 50-lb. steel rails on sal sleepers with the exception of the Man-Aunrihar section which is laid with 411-lb, steel rails.

Bullast .- The whole line, except quite new constructions, is ballasted with kunkur or broken brick.

Fencing .- The main line is fenced.

Curves.—The sharpest curve is of 900 feet radius.

Gradients.—The ruling gradient is 1 in 300. On the various ghat lines the gradients are steeper.

#### Terms of contracts-

The Bengal and North-Western and Tirhoot railways are worked under the following contracts:—

Contracts of—12th December 1582.—Bengal and North-Western Railway Company's principal contract.

22nd February 1886 .- Contract modifying that of 1882.

19th December 1891.—Contract, supplemental to those of 1882 and 1886, providing for the Revelganj,
Bahramghat, Burhwal, Tulsipur, Katarnian Ghat and Turtipur branches of the Company's railway, and for the exercise of running powers over the

Cawnpore-Burhwal (3' 38" gauge) link.
23rd July 1896.—Contract, supplemental to those of 1882, 1886 and 1894, providing for the Ganges-Gogra Doah lines of the Company's railway, known as the Ganges-Gogra Doab contract.

15th January 1903.—Supplemental contract for the Ghazipur-Ballia, Azamgarh-Shahganj and Aunrihar-Jaunpur lines.

21th April 1903 .- Supplemental contract regarding rate of exchange.

14th December 1905.—Contract, supplemental to that of 1882, regarding the date on which the Secretary of State may exercise his right to purchase the Company's line and the period at which he may fix the purchase price, and revising the terms on which the Tirhoot railway will continue to be worked by the Bengal and North Western Railway Company after the expiration, on the 31st December 1904, of the contract of 1890.

## History of railways constructed and in progress. [For Index see page 112.]

Number Main head 12 Sub-heads (a) & (b) · BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—contd.

12 (a) Bengal and North-Western railway proper (3' 3\frac{3}{8}" gauge)-concld.

Terms of contracts-concld.

The general conditions of the contracts are as follows :-

Government aid .- Land alone was provided free.

Currency of contracts.—(1) Bengal and North-Western railway contracts.—The contracts of 1882, 1986 and 1894, viz., those for the working of the Bengal and North-Western railway proper, terminate by effluxion of time on the 31st December 1981, when the line and all its appurtenances become the property of Government by payment to the Company of the value of the rolling-stock, movable machinery, stores, etc. Government may, however, determine the contract on the 31st December 1912 or on the 31st December 1932, on one year's previous notice of intention to purchase, paying 25 times the average net earnings (after deducting from such net carnings the shure of surplus profits over 6 per cent. to which Government would have been entitled under the contract of 12th December 1382) for the five years preceding the purchase. Government may also determine the contract at any time, on six months' notice, if the Company fails to observes its obligations, on paying the value of rolling-stock, stores, etc., and fair value of line and fixed machinery and plant,

less value of latter treated as a reversionary sum absolutely payable on the 31st December 1981.

(2) Ganges-Gogra Doab contract.—The contract of 1896, ciz., that covering the Ganges-Gogra Doab lines, runs concurrently with those of 1882, 1886 and 1894, as does also the supplemental contract of 1903; but, in the event of Government exercising the right of purchase in 1912 or 1932, the amount to be paid is the actual outlay on the line, as

shown in sterling, appearing in the capital account.

Nors.—Government reliquished their right to acquire the Company's line on the 31st. December 1912, on the condition that they shall have the power to fix in 1912 the purchase price of the Bengal and North-Western railway and to purchase the line at that price on the 31st.

Tirhoot railway contract.—The contract of 1890, for working the Tirhoot railway, terminated on the 31st December 1901, and the revised contract under which the railway continues to be worked by the Company came into force on and from the 1st January 1905 and is current until the 31st December 1932, subject to the proviso that the Scoretary of State may, if he should think it desirable, terminate it in 1919 or modify it at that date in such manner as he may think fit.

Power of Company to surrender contracts .- Nil.

Terms of working .- The gross earnings of the State and Company's sections to be kept entirely separate.

All charges for maintenance of way, works and stations, other than those for general supervision, to be allocated to each section on the basis of actual outlay on that section, all other working expenses being divided between the two

sections in proportion to the gross earnings of each.

4 per cent, on respective outlay on "rolling stock," "stramers, barges and landing stages," "stores," "station, station machinery and staff quarters at Sonepore" for "joint use," and future expenditure on "workshops," to be charged to working expenses in addition to ordinary working expenses and contribution to Provident Fund, for apportionment to the State and Company's sections, in the ratio of their respective gross carnings. This amount of interest to be credited to the respective Revenue Accounts in the ratio of contributions of capital to the joint accounts.

Government to first receive out of the Tirhoot railway net earnings of each year 5 per cent, on all capital expended

on the Tirhoot line open for traffic, including expenditure subsequent to 31st December 1904.

The residue of not carnings to be dealt with as follows:—

(a) if the residue does not exceed ten lakks, 4ths to Government and 4th to the Company;

(b) if the residue exceeds 10 lakhs, the sum of 10 11khs shall be divided as in condition (a) and the excess over 10 lakes shall belong 14ths to Government and 15th to the Company.

Rates and fares .- On the Company's section the Company may, with the approval of Government, fix rates and fares. On the Tirhoot section certain maxima and minima have been fixed, within which the Company is permitted to vary

						T	APLE I.				Table the Including the railway fr	e Tirhoot
c	aler	ndar	y a	r.	Capital outlay to and of each year.	Gross carnings.	Not oarnings.	Payments received for working the Tirhoot Railway.	Tetal	Foresutage en ear ital cuthay.	Eirnings per mile per week.	Proportion of expenses to earlings
					Rs.	Rs.	Re.	Rs.	Rs.	1	Rs	
1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898					1,52,47,428 2,01,86,980 2,36,16,102 2,56,22,684 2,61,51,593 2,63,41,872 2,57,94,904 2,76,68,842	77,670 12,05,320 18,51,074 19,44,062 22,00,543 22,118,615 24,76,909 20,39,977 26,14,546 26,77,342 25,71,036 26,26,033 27,55,718 38,31,800 43,44,861 44,46,693	15.54,569 15.54,569 16.54,194 15.74,560 16.70,172 17.24,277 19.74,220 26.70,911 24.79,433	12m uotamatu 667 668 723 664 667 74,1965 72,664 668 668 668 668 668 668 668 668 668	- 26,221 6,10,749 8,9,159 8,37,044 9,88,841 10,57,964 12,32,997 10,24,993 17,01,254 16,48,762 17,57,675 17,41,786 17,99,152 20,50,865 27,52,861 27,52,861	3:03 3:27 3:27 3:78 4:400 4:456 5:77 5:39 5:79 6:15 5:61 1:07 4:08 4:09 4:00 4:00 4:00 4:00 4:00 4:00 4:00	27 72 106 90 102 103 121 121 120 123 133 134 129 129	133-76 49 32 16:36 56:44 55:25 52:35 44:08 40:04 41:12 49:20 42:45 42:35 42:37 43:78 46:67 46:67 46:57
1901 1902 1908	:	:			5,50,91,630 5,84,82,525 6,21,09,547	53,66,794 55,00,23a 61,98,433	30,97,372 20,72,153 38,53,972	76,853 76,671 1,04,369	31,74,225 1-0,40,854 20,58,341	5:76 5:91 6:47	140 154 161	46:89 40:61
1904 1905 1906	:	:		~	6,43,92,183 6,77,55,566 7,18,66,623	67,16,983 61,79,116 77,02,976	48,28,496 34,72,017 40,92,699	1,16,834 1.69,446 1,92,032	44,45,330 26,41,163 42,81,781	€ 5.87 6:00	168 151 168	79°6 43°1 47°3

## History of railways constructed and in progress. [For Index see page 112.]

Number Main head 12 Sub-heads (a) & (b). BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—concld.

12 (6) Tirhoot railway (3' 33" gauge)-

Details of construction -

The open mileage of this railway is 614:30 miles, consisting of (1) main line (Semaria Ghat to Bettish and Samastipur to Khanwa Ghat), 242.58 miles, and (2) branches, 371.72 miles. Of the above 9.47 miles are double line. First sanction to the construction of the main line was accorded in 1874 and it was opened throughout in 1890. There were in addition 16406 miles under construction.

Permanent-way — The following types of rails are in use: —50-lb. flat-footed steel, 411-lb. flat-footed steel and 60-lb. iron. The sleepers are of sal, pyinkado, jarrah and cast iron of Denham-Olpherts' pattern.

Ballast.—The line, except quite new constructions, is ballasted with kunkur or broken brick.

Fencing.—The main line is fenced with stone posts and 4 wires.

Curves.—The sharpest curve, which is on the main line, is of 1,500 feet radius.

Gradients.—The ruling gradient is 1 in 300, except between Samastipur and Khanwa Ghat on which 3:42 miles are on a gradient of 1 in 200. On various river ghat lines the gradients are steeper.

`:

Terms of contracts-See under Bengal and North-Western railway proper, 12 (a).

Statistics of working-

			TA	BLE 1.					Тан	lk II.	
Calen- dar year,	Capital outlay to end of each year.	Gross earnings.	Net carnings,	Payment made to the Bengal and North-West- ern Railway Company for working the line.	Total income	Percentage of total income on capital outlay.	Iuterest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to carnings.	Remarks.
	Rs.	BH,	R4.	R4.	Rs.	.,	Rs.	Rs.	R <sub>8</sub> .		
1875				,				•••	39	107:62	
1876 .	i	•	غ	e e					71 77	68.67	
1877 . 1978 .			74	7.			•••	•••	108	69·85 75·34	
1979 .	59,38,320	4,58,733	To.	Eta?	1,07,519	2.02	2,37,111	-1,29,593	113	76.49	
1880 .	56,13,274	5,51,068	Information not svailable	Information not available	2,33,642	4.16	2,50,659	-16,997	102	56.40	
1881 .	72,02,917	5,41,255	ă	ŭ	2,36,200	3.28	2,67,215	-31,045	110	59.57	
1882 1883	1,07,92,877 1 32,83 021	6,60,022 8,92,141	8	c o	2,51,017 2,59,705	2:36 1:96	3,86,612 4,90,014	-1,82,565 -2,39,309	136 103	61.50	
1883 1884	1,48,84,982	11,90.073	la tr	i da	2,66,582	1.79	5,7 1,369	-3,07,787	105	70·90 77·60	
1885 .	1,14,17,916	12,78,634	or o	n.	3,59,269	2.49	5,86,195	-2,26,926	98	71.90	
1886 .	1,54,33,549	11,93,633	1 3	Ē	5,01,183	3.32	6,30,944	-1,29,755	109	66.56	
1887 .	1,97,49,195	17,22,955	i		6,95,725	3.23	7,79,801	84,076	122	59 62	
1858 . 1889 .	2,07,78 252 2,12,23,091	18,07,283 18,96,674			7,99,875 9,78,246	3.85 4.61	8,17,485 8,41,932	-18,61 <b>0</b> +1,36,314	123 127	55 80 48:42	
									and Nort	with Bengal h-Western	
1890 .	• 2,29,94,165 • 2,34,99,148	23,92,977	i .		13,21,797	5.75	9,14,207	+ 4,07,590	''''		
1891 .	2,34,99,145 2,43,25 804	21,80,279	11,23,332	69,484	13,35,818	5.76	9,34 385	+ 4,19,463 + 5,65,790		•••	
1992 . 1893 .	2,49,03,8 3	21,94,862 26,81,190	13,82,875	67,060 66,842	13,15,815	5°41 5°39	9,50,025 10,01,205	+ 3,11,928			
1894 .	2,50,08,061	29,42,305	15,35,581	72,358	11,63,223	5.85	9,98,388	+ 4,64,835			
1895 .	2,56,02,092	30,89,611	15,61,276	72,969	11,88,367	5.81	10,18,013	+ 4,70,351			
1896	2,60,38,655	31,61,172	15,56,944	71,614	11,85,370	5.70	10,27,821	+ 4,57,509			
1897 1898	3,11,00,098 3,46,13,176	32,38,109 31,11,110	16,29,812 16,67,068	74,905 75,885	15,51,907 15,91,183	5.00 1.39	10,33,630 13,18,761	+ 5,16,277 + 2,72,119	~-		
1899 .	3,80,27,533	31,21,808	14,42,101	61,940	13,80,161	3.63	14,62,603	- 82,142	:::		
100 .	4 30,15,219	36,47,197	15,66,413	49,563	15,16,850	3.53	16,19,281	-1,02,381			
1001 .	4,61,91,293	43,16,760	22,75,660	76,853	21,98,507	4.76	17,67,799	+ 1,31,008			
1902 .	4,91,41,200	45,50,632	21,55,201	76,671	22,78,530	481	18,77,205	+ 5,01,325			Includes S
1903 .	5.08 62,468	56,72,952	81,92,619	1,04,369	30,88,250	6.07	19,86,515	+ 11,01,785		•••	gauli-Raxar branch fro
1901 .	5,64,95,579	62,63,114	34,98 567	1,16,834	33,81,733	5.99	21,48,021	+12,33,712			11th Apr
1905 . 1906 .	6,21,36,962 6,73,40,339	61,81,754 66,80,324	35,57,423	1,69,446 1,92,032	33,×7,977 37,05,278	5.45 5.50	23,54,563	+10,88,414 +11,54,844	:::		1904.

Sagauli-Raxaul branch, before it was purchased by the State,

											TABLE I.				TABLE	II.
				alen	dur 3	year.					Capital outlay to end of each year.	Gross carnings.	Net earnings.	Percentage on capital outlay.	Earnings per mile per week.	Proportion of expenses to esrnings.
										- i	Ra.	Rs.	Ra.		Bs.	
1896 1897	:	:	:	:	:	:	:	:	:	:	1,26,044 6,68,783		 	••• •••	 •••	***
1896 1899	:	:	:	•		:	:	. ,	:	:	8,07,550 10,81,740	5,488	Credited 'to	•••	` 90	40.00
1900 1901	.:	:	:	:			:	:	:		12,12,073 10,67,014	25,830 37,192	) capital. 13.593	1.27	80 40	52-62 63-44
1902 1903	(up to	1063	Anı	siv	•		•	:			11,73,421 11,16,252 11,16,352	39,296 43,809 18,740	18,638 18,571 10,114	1.74 1.66 0.91	42 51 74	52-57 57-61 46-08
	( P 00		241.			<u>.</u>	<u>.</u>	4.	•		Amalgamated	with the Tirhoo	t railway from	11th April 1904.		

## History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head 13}}{\text{Sub-heads }(a)}$ . BENGAL DOOARS RAILWAY SYSTEM—

Chairman—Colonel A. J. Filgate, R.E.
Secretary—H. Rendel, Esq.

Offices-271 Winchester House, 50, Old Broad Street, London, E. C.

## Lines comprising the system-The Bengal Dooars railway system is made up of-

										•	Miles.
(a) Bengal Dooars railway (3' 3\frac{1}{2}" gauge)	•	•									86.4 <b>ď</b> ,
(b) Bengal Dooars railway extensions (3'34" gauge;	•		•		•	•			•	•	116.56
•											
							T	tal			152.9

The lines were constructed for opening out the Western Dooars and for the development of the tea industry.

## 13 (a) Bengal Dooars railway proper (3' 33" gauge)-

#### Details of construction-

The total length of open mileage is 36:40 miles, divided into main line (East Bank Teesta to Dam Dim), 31 miles, and branch, 5:40 miles. Construction was sanctioned in 1891 and the line was opened through in 1893.

Permanent-way.-The line is laid with \$11-lb. flat-footed steel rails on sal sleepers.

Ballast,-The line is ballasted throughout with stone.

Fencing .- The line is unfenced.

Curves. - The sharpest curve is of 1,432:50 feet radius.

Gradients.—The ruling gradient is 1 in 166.

#### Terms of contracts-

The Bengal Dooars railway and the extensions are worked under the following contracts:-

Contracts of-27th April 1891 .- Bengal Docars railway principal contract.

2nd March 1898.—Contract supplemental to that of 1891 (for extensions).

27th September 1900.—Supplemental to that of 1898 (extending period of completion of Dam Dim-Bagrakote extension).

7th November 1901.—Supplemental to those of 1895 and 1900 (extending period for completion of Mal-Madaribat extension).

The general conditions of the contracts are as follows:-

Government aid.—Land free of cost from Government; and, from the District Board of Jalpaiguri, an annual subsidy of such amount not exceeding Rs. 4,000 per annum as may be required to make up the net profits of the undertaking to five per cent. per annum on the capital outlay.

Currency of contracts.—On the 31st December 1919, and thereafter at intervals of soven years, Government have power, by giving twelve months' previous notice, to terminate the contract and take over the line on payment to the Company in the case of the Bongal Dooars railway of one and two-fifths of the invested capital and capital liabilities, and in the case of the extensions of a sum equal to 25 times the average net carnings during the last preciding five years, but not exceeding by more than 20 per cent, the capital expenditure and capital liabilities of the Company and not less than the capital expended and the capital liabilities. If, at any period, the Bengal Dooars railway or the extensions should not be worked for six consecutive months, the Company can also be called upon to surrender the line and extensions on receipt of the actual sum expended up to the date of notice.

Terms of working.—If worked by the Company the whole of the profits go to the Company. If worked by the Eastern Bengal (State) railway the Secretary of State retains in each half-year 10 per cent, of the gross earnings, the remaining 60 per cent, being paid to the Company after deduction of the income-tax payable to Government.

#### Rates and fares-

Bengal Doours railway and extensions from Mal to Madarihat and Dam Dim to Bagrahote --

Certain maxima and minima have been fixed subject to alteration from time to time. If the gross receipts reach 12 per cent. on the capital, Government may reduce maxima to the extent of 25 per cent., except in the case of certain special rates.

Extension from Barnes Junction to Lalmanirhat-

Certain maxima and minima have been fixed within which rates may be varied.

## History of railways constructed and in progress. [For Index see page 112.]

Number Main hoad 13 Sub-heads (a) and (b). BENGAL DOOARS RAILWAY SYSTEM—concld.

13 (a) Bengal Dooars railway proper (3' 3\frac{3}{8}" gauge)—concld.

Statistics of working-

•••••							TABL	E I.				ТАВІ	e II.
	Calone	iar y	ea <b>r</b> .	ı	Capital outlay o end of each year.	Gross carnings.	Net errnings.	Percentage on capital outlay	Subsidy from District Board.	Total	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to carnings.
1891 1892 1893 1894 1895 1896 1897 1898 1899 1900			: : : : : : : : : : : : : : : : : : : :		Rs. 16,479 12,67,626 18,49,991 22,84,924 23,26,476 24,33,213 26,50,713 26,18,650 26,26,748 26,12,695	R4. 1,11,812 2,05,286 2,55,537 2,70,450 2,86,407 2,00,030 2,77,037 2,12,730	Rs	 3*12 4*57 5*48 5*48 4*15 4*51 7*17	4,000 1,000  4,0°0	Rs 57,639	 3:12 4:74 5:65 5:42 5:18 4:30 4:51	Rs 69 109 125 136 145 137 138 138 137 188	 49·80 49·20 49·73 61·26 49·27 57·40 55·41 43·06
1901 1902 1903 1904 1905	:	<b>:</b>	:		26.44,873 26,50,627 26,95,547 26,64-642 27,26,891 27,35,008	8,10,920 2,73,340 3 00 965 3,46,277 3,70,343 4,08,623	1,76,390 1,71,155 2 23 786 2,56,651 2,40,504 2,96,703	6 67 6 47 8 30 9 63 9 15	::: :: :::	1,76,299 1,71,455 2,23,786 2,56,651 2,49,598 2,96,703	6 67 6 47 8 36 9 63 9 15	156 144 156	43:27 37:27 27:80 25:88 32:60

## 13 (b) Bengal Dooars railway extensions (3' 34" gauge)-

#### Details of construction-

The total open mileage of the extensions is 116 56 miles, comprised of (1) Eastern extension (Mal to Madarihat), 44 miles, (2) Southern extension (Barnes junction to Lahmanirhat), 65:80 miles, and (3) Western extension (Dam Dim to Bagrakote), 6:76 miles. The construction of the extensions was sanctioned in 1898 and they were opened in 1903, 1900 and 1902, respectively.

Permanent-way.—The line has been laid with \$11-ib that-footed steel rails on sal sleepers.

Bullast .- The line is ballasted throughout with stone.

Fencing .- The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.-The ruling gradient of the Southern extension is I in 200 and of the Eastern and Western extensions, 1 in 100.

Terms of contracts. - See under Bengal Dooars railway proper, 13 (a).

Statistics of working-

									'	'ABT	к І.				TARLI	II.
1.	-	· · · •	 C	alond	lary	Par.					Capital outlay to end of cach year.	Gro-4 carnings.	Net curnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to carnings.
1897 1898 1899 1900 1901 1902 1908 1904 1905			 				:	 	:		Rs. 72,151 4.03,611 26,7-,455 47,11,632 62,26,567 72,66,166 79,30,172 84,97,77 87,92,080	Rs.  16,191 1,76,399 2,55,631 3,47,832 4,15,179 5,12,343	Rs 5,015 68,937 56,266 1,05,916 1,08,684	  0·11 1·11 1·19 1·31 1·24 2·25	Rs 13 47 62 71 68 85	 72:31 69:92 65:99 69:55 73:88 61:30

## Number sub-heads (a) to (b). BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM— Lines comprising the system .- The Bhavnagar-Gondal-Junagad-Perbandar railway system is made up of-

				.,	(0) 0 111											Open line. Miles.
(a) Bhavnagar-Gomlal-Juna	gad-re	ornau	da <b>r</b> r	anway	(3° 34" gauge)											384 19
(b) Dhrangadra railway .		•	•		(3' 31 ' gange)			•								20.83
(c) Jamuager railway		•			(4 3%" enuge)	•		•	•	•	•			•		54.22
(d) Jetalsar-Rajkot railway		•			(3′ 34″ gauge)	•	•									46.21
													To	ta1		AKELAK

## 14 (a) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3' 33" gauge)-

This line was constructed by Government agency, and is owned and worked by the Native States after which it is named.

#### Details of construction-

The line is 384'19 miles long. It consists of the following sections, (!) Bhavnagar to Wadhwan, 105'08 miles, (2) Dhola to Porbandar Baudar, 159'51 miles, and (3) Jetalsar to Veraval Bandar, 69'65 miles. Sanction to the construction of the first section was given in 1879, to the second section in 1879 and 1888, and they were opened through in 1880 and 1889, respectively. The third section was sanctioned in 1886 and opened through in 1890.

History of railways constructed and in progress. [For Index see page 112.]

Main head 14 Number Sub-heads (a) to (d). BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—contd.

14 (a) Bhavnagar-Gondal-Junagad-Porbandar railway proper (8' 3%" gauge)-concld.

Details of construction—concid.

Permanent-way.—The permanent-way consists of 411-1b. flat-feoted steel rails on creosoted pine and deedar sleepers, except on the Dhoraji-Porbandar section, where the rails are laid on steel pea-pod sleepers.

Ballast. - The line is ballasted with broken stone, with the exception of the length between Chuda and Wadhwan which is ballasted with kunkur.

Fencing.—The line is practically unfenced.

Curves.—The sharpest curve is of 1,200 feet radius.

Gradients .- The ruling gradient is 1 in 200, except on the Jetalsar-Veraval section, where it is 1 in 150.

Terms of contract-

The railway is worked under the following agreement:—

Agreement of—28th November 1896, having effect from the 1st January 1897 (between the several proprietary States) for management and working by a Board of Control.

The general conditions of the agreement are as follows :-

Government aid .- Nil.

Terms of agreement.—The whole system is worked by a Board of Control, consisting of one nominee of Government to be President, and one nominee from each of the proprietary States of Bhavnagar, Gondal, Junagad and Porbandar. The existing lines owned by those States are separately and entirely described as the "Integral railways," and their combination is termed the "Open system." The decisions of the Board of Control are based on the majority of "Members' single votes" and "Proprietary votes" recorded. "Members' single votes" prevail at special meetings, where each member has one vote; while "Proprietary votes," i.e., votes revised annually on varying capital outlay, prevail at ordinary and extraordinary meetings.

Currency of agreement.—The term of the agreement is from the 1st January 1897 to the 31st December 1900.

Until a new agreement is adopted the terms of this agreement remain in force.

Power of Board to determine agreement .- By unanimous vote the Board of Control can cancel or modify any of the clauses of the agreement, and can also rescind or alter any resolution; no changes can otherwise be made until expiry of three months from date of passing such resolution. Any proprietary State can terminate the agreement after the 31st

December 1900, subject to 12 months' notice at the beginning of the year.

Terms of working .- The earnings of the several integral railways belong wholly and exclusively to each integral railway, and, similarly, the capital and revenue expenditure is wholly borne by the same. All expenditure on the open railways, and on the integral railways as may require apportionment is divisible as prescribed in Appendix A to the agreement. The Bhavnagar State provides funds for working the whole system as well as for ordinary capital on the integral railways, and is secured against all such disbursements by the payment into the Bhavnagar State Treasury of all receipts of the entire open system. All funds for major capital works are provided by the integral railway concerned, or by special arrangement with the Bhavnagar State Treasury. Each integral railway is the sole proprietor of all works, buildings, etc., on its own length of line and is entitled to 7½ per cent. interest on the paid-up value of all property in occupancy for open system purposes, to compensation for losses for works and buildings falling into disuse and to 7½ per cent. per annum for any additional accommodation required by the open system.

Rates and fares.—The maximum scale of rates and fares sanctioned by Government is applicable to the whole system but rates and fares may be altered within this scale so as to accommodate them to the circumstances of traffic on any

integral railway: provided that such alteration be not prejudicial to the interests of any other integral railway.

										TABLE 1.				Тав	LE II.
				Culer	da <b>r</b> :	year.				Capital outlay to end of each your.	Gross carpings.	Net earnings.	Per cent. on capital outlay.	Farnings per mile per week.	Proportion of expenses to earnings.
										Rs. 4,80,177	Ra.	Ra.		Ra.	
879 880	:	:	:	:	:	:	:	:	:	49,19,304	:		::.	•••	•••
881 882										74,46,353 86,75,711	6,88,385 8,76,836	2,31,706 3,54,649	3·11 4·09	78	70-19
882 883	•	•	•	•	•	•	•	•	•	90,40,232	8,94,179	3,26,513	3.61	87 89	59.55
884	•	•	•	•	•	•	•	•	•	92,92,040	10,92,312	4,98,107	5:36	109	63·47 54·46
685	:	:	:	:	:	•	:	:	:	96,25,031	10,04,660	8,91,217	4.07	98	59.55
986									•	98.57,553	9.65,379	4,15,149	4:21	96	57:00
887	•	•	•		•	•	•	•	•	1,08,28,023	9,80,837	4,42,103	4.08	98	54-93
888	•	٠	•	•		•	•	•	•	1,30,68,663 1,62,60,477	11,20,260 18,80,417	5,06,545	3.88	109	50.58
889 890	•	•	•		•	•	•	•	•	1,68,42,051	15,71,789	7,01,177 6,00,267	4°33 3°56	97 91	56.55
000	•	•	•	•	•	•	•	•	•	3,00,12,001	10,11,100	0,00,00	3 30	31	61.81
891										1,71.24,771	14,77,263	4,75,786	2.78	85	67.79
B92	•				•	•	•	•	•	1,72,52,030	15,78,178	4,87,876	2.54	91	72.25
893	•	•		•	•	•		•		1,72,28,860	20,63,104	8,84,708	5.16	119	56.98
894 895	•	•	•	•	•	•	•	•		1,73,65,592	18,40,287 19,52,221	7,91,335	4.56	106	49.61
500	•	•	•	•	•	•	•	•	•	1,76,00,032	10,02,221	8,21,220	4.67	113	57:93
896										1,75,68,395	19,80,878	9,89,274	5.63	114	50.06
897				•						1,76,53,652	19,21,640	8,19,081	4.64	105	55.04
898				•		•	•			1,78,56,546	16,98,657	7,09,781	3 98	97	58.22
899		•	•	•	•	•	•	•	•	1,79,56,272	18,53,483	9,26,935	5.16	107	49.99
900	٠	•	•	•	•	•	•	•	•	1,80,00,616	19,53,565	10,10,773	5.62	113	48.27
901						٠.	•			1,80,96,671	15,37,378	6,80,089	3.76	89	55.76
002 008	•	•	•	•	•	•	•	•	-	1,80,87,538 1,81,58,814	13,71,837 16,04,638	5,06,842 8,36,670	3·13 4·61	79	58.72
708 304	٠	•	•	•	•	•	٠	•	•	1,80,44,250	18,60,565	10,39,916	5.76	92 107	47·86 44·11
905	•	•	•	•	•	:	:	•	:	1,80,09,429	18,51,324	9,90,981	5.50	106	46:47
	•	٠	•	•	•	•	•	•	-	1	• • •				
906	•									1,81,74,947	19,57,290	11,07,581	6 09	113	43.41

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 11 Sub-hoads (a) to (d). BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—contd.

## 14 (b) Dhrangadra railway (3' 3\frac{3}{3}" gauge) —

This line was constructed for the Dhrangadra State by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

## Details of construction-

The line is 20:83 miles long and connects Wadhwan with Dhrangadra. Its construction was sanctioned in 1897 and it was opened in 1898.

Permanent-way.—The permanent-way consists of 414-lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—The ballast used is of broken sand-stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,400 feet radius.

Gradients.—The ruling gradient is 1 in 175.

#### Terms of contract-

The railway is worked by the Board of Control of the Bhavongar-Gondal-Junagad-Porbandar railway under an Agreement—having effect from the date on which the line was opened to traffic.

The general conditions of the agreement are as follows:

Government aid .- Nil.

Currency of agreement,—The agreement shall hold good so long as the working agreement of the Bhavnagar-Gondal-Junagad-Porbandar railway, dated the 28th November 1896, is in force.

Terms of morking.—Forty per cent. of gross earnings (subject to a biennial revision) p'us 5 per cent. for hire of rolling stock and in addition, actual expenditure on the maintenance of Way. Works and Stations.

Rates and fares. -The same rates and fares is are applicable to the Bhavnigar-Gondal-Janugud-Porbandar railway.

#### Statistics of working-

											TABLE 1.				TAB	LF II.
		-		Cale	ndar	sear.					Capital outlay to end of each year.	Gross carnings.	Net carnings.	Per cent, on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
											Rs.	Rs.	Ba,		Ra.	
1897 1898 1899 1900	<i>:</i>	:	:	:	:	:	:	:	:		5,930 5,93,589 6,06,104 5,86,534	23,395 63,876 <b>57,</b> 866	10,617 20,978 18,984	1.79 3.46 3.21	 37 59 53	54·62 67·16 66·91
1901 1902 1903 1904 1905	:	: :	• :	:	:	:	:	:	:	•	5,86,100 5,85,911 5,86,638 5,7,116 5,66,695	46,196 37,731 43,053 47,516 49,042	11,765 8,075 11,713 15,446 13,375	2:01 1:38 1:99 2:63 2:28	43 35 40 44 45	74-53 78-60 72-80 67-49 72-73
1906										٠	5,86,791	65,121	25,707	4 35	<b>6</b> 0	60.52

## 14 (a) Jamnagar railway (3' 34" gauge)-

This line was constructed for the Navanagar State by the Bhavnagar-Gendal-Junagad-Porbandar railway by which it is being worked.

## Details of construction-

The railway is 5 P22 miles long and connects Rajkot with Bedi Banlar. Its construction was sanctioned in 1893 and it was opened in 1897.

Permanent-way.—The permanent-way consists of 411-1b. float-footed steel rails on crossoted pine and deodar sleepers.

Ballast,—The ballast used is of broken stone.

Beneing.—The line is unfenced except at the approaches to the Victoria bridge near Jamnagar and to the south of the Jamnagar station yard.

Curves .- The sharpest curve is of 1,000 feet radius.

Gradients .- The ruling gradient is 1 in 200.

### Terms of contract-

The railway is worked by the Board of Control of the Bhavnagar-Gondal-Junagad-Porbandar railway under an Agreement—having effect from the date on which the line was opened to traffic.

The general conditions of the agreement are the same as apply to the Dhranga'lra railway, [14) (b)] except as follows:—

Terms of working.—\*Forty per cent. of gross earnings (subject to a biennial revision), plus actual expenditure on the \*Reduced with effect from the 1st July 1006 to 35 per cent. in half-whom the earnings per mile per week exceed Bs. 50.

maintenance of way, works and stations; the locomotives and rolling stock being supplied by the proprietary State.

## History of railways constructed and in progress.

[For Index see page 112.]

Number Mnin head 14 Sub-heads (a) to (d). BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—concid.

14 (c) Jamnagar railway (3' 3% gauge)--concld.

Satistics of working-

											•	T	ABLE I.		Тав	Lu II,
	<del>.</del>			Cal	ondar	year	r. 	¥			Capital outlay to end of cach year.	Gross carnings.	Not earnings.	Per cent, on capital ontlay.	E-mings per tude per week	Proportion of expenses to earnings.
•											Rs.	Rs.	Rs.		Rs.	
1894 1895	:	:	:	:	:	:	:	:	:	:	15,000 62,956		•••		 	***
1896 1897 1898 1899 <b>19</b> 00	:	:	:	:	:	:	:	:	:	:	14,91,727 22,50,033 20,18,496 25,18,558 23,19,481	81,476 1,02,045 1,26,323 1,49,453	28 954 31,783 51,510 59,540	1 29 1 07 2 23 2 58	 41 36 45 53	65-73 69-12 59-20 60-09
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:	:	:	28,09,969 23,54,210 23,18,338 23,27,281 23,27,105	1,36,314 1,31,164 1,39,756 1,41,650 1,48,341	51 101 F3,751 60 127 , 56 721 62 008	2:92 2:8 2:55 2:14 2:66	48 46 50 70 53	62:29 59:00 56:98 50:78 88:20
1906											23 26,826	1,51,335	(0,076	2 58	54	60:30

#### 14 (d) Jetalsar-Rajkot railway (3' 33" gauge)-

This line was constructed for the Jetalsar-Rajkot Railway Syndicate by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

#### Detail of construction --

This line is 46:21 miles long. Its construction was sanctioned in 1892 and it was opened in 1893.

Permanent-way.—The permanent-way consists of 414-lb. flat-footed steel rails on ercosoted pine sleepers, except for five miles where the rai's are laid on steel trough sleepers.

Ballast.—The ballast used is of broken stone.

Fencing .- The line is unfenced except between Rajkot Para and Rajkot Junction.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 200.

#### Torms of contract\_

The railway is worked by the Board of Control of the Bhavnagar-Gondal-Junagad-Porbandar railway under an agreement-having effect from the date on which the line was epened to traffic.

The general conditions of the agreement are the same as apply to the Dhrangadra railway [11 (b)] except as follows :-

Terms of working .- \* Forty per cont. of gross carnings (subject to a bicunial revision), plus actual expenditure on maintenance of way, works and stations; the becometives

Reduced with effect from 1st January 1907 to 35 per cent, in half-years when the earnings per unle per wook exceed 8s 50.

† The Proprietary State not having supplied the lecometries and rolling stock a farther deduction of 5 per cent from gross cannings is made as hire for stock. and rolling stock to be t surplied by the Preprietary State.

												Тава	вI,		TAHI	e II.
				Cale	ndar	your.					Capital ontlay to end of each year.	Grosa earninga.	Net earnings.	Percent on capital outlay	Errings per mile per weck,	Froportion of expenses to expenses.
1892						_			_		R4 7,89,792	Ba.	Rs.		Ra	
1893	·	:	•	•	:	:	:	÷	:	:	14,35,593	00.000	50,826	3·55		•••
1894											14,99,605	1,55,556	60,876 61,152	3.55	50	50.59
1895	•	•	•	•	•	•	•	•	•	•	18,03,585	1,83,338	77,413	4 08 8·15	65 7 <b>6</b>	60 68 57:76
1806	•	•	٠		•	•	•		•		15,29,265	1,97,116	84,238	5:71	82	**
1897	•	•	•	•		•	•	•	•	•	15,47,463 15,78,017	2,05, 13	84, 20	5.47	82 85	57'26
18:8	•	•	•		٠	•		•	•		15,78,017	1,77,911	76,957	4.8.	74	58:72
1899 1900	•	•	•	•	•	•	•		•	•	15,83,208	1,9×,027	78,726	4 97	83	57:50 60:18
	•	•	•	•	•	:	•	•	•	•	15,74,082	2,02,718	86,214	5-44	43	57:17
1901										.	15,74,039	1 76 383	67,251	4 27	4	
1902	•			•			٠				15,78,593	1,76,383 1,41,317	54 485	3·15	73	61 87
1903	•	•	•		•	•	•	•		.	15,78,658	1,66,104	63,230	4.01	60	67.52
1904 1905	•	•	•	•	•	•	•	٠		• {	15 74,655	1,88,139	€0. 48	4.39	69 79	62.00
1002	•	•	•	•	•	٠	•	•	•	- 1	15,80,207	1,91,1-5	71,8 2	4.74	éo	63.25
1906										ı			121.7 ~	7 / 1	, eu	60.83
7000	•	•	•	•	•			•	•	٠,	15,82,472	1,83 261	65 658	4.12	76	6 18

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 15 Sub-heads (a) & (b)

#### BURMA RAILWAYS SYSTEM—

Chairman.—Sir Auckland Colvin, K.C.S.I., K.C.M.G., C.I.E. Managing Director.—Lieutenant-Colonel Alfred Glynn Bogbie, R.E. Offices.—199, Gresham House, Old Broad Street, London.

Lines comprising the system.—The Burma railways system is made up of-

							Opon line.	or sanctioned for	Total.
(a) Burma railways (3'33" gauge)							Miles. 1,340 15	coustruction. Miles. 72:95	Milone 1,413:10
(b) Burma railways extensions (3' 31" gauge)	•	٠		•	•	•		186 <b>*93</b>	186.93
				Tot	al		1 340 15	250-88	1,600.03

#### 15 (a) Burma railways proper (3' 33" gauge)—

The Burma Bailways Company was formed in 1896 for the pyrpose of taking over the working of the then existing system of State railways (3' 3\frac{3}{3}'' gauge) in Burma and extending it by the construction of other lines, particularly one from Mandalay to Kunlong. The railways taken over by the Company from Government on the 1st September 1896 comprised the following lines:—Rangeon to Prome on the Irrawaddy river; Rangeon to Mandalay, and thence to the bank of the Irrawaddy, opposite Sagaing; and Sagaing to Mogaung, with an extension to Myitkyina and a branch to Katha, whence there is communication by river with Bhamo.

Details of construction—

The open mileage of the Burma railways, 1,340:15 miles, consists of (1) Main line section, main line (Rangoon to Mandalay), 386 miles, branches, 81:60 miles; (2) Irrawaldy section (Rangoon to Prome), 161 miles; (2) Mu Falley section, main line (Sagaing to Myitkyina), 331:20 miles; branches, 91:46 miles; (4) Mandalay-Kunlong section (Myohaung to Lashio), 177:84 miles, and (5) Bassein-Henzada-Lelpudan section, 110:96 miles. Of the above 23:80 miles are double line.

First sanction to the construction was given in 1871; and the first three sections were opened through in 1889, 1877 and 1898, respectively, and the last two sections in 1903.

Besides the above 72.95 miles were sanctioned for construction, err. (1) from Thumaing to Malagaon, 6.70 miles, and (2) from Neikban to Begayet, 66.25 miles. Work on (1) has not yet been commenced while that on (2) has been suspended.

Permanent-way.—The rails in use on the system are 60-1b, 50-lb, and 414-lb, flat-footed steel. The sleepers throughout are generally of teak, pyinma and pyinkado, the last named largely predominating.

Ballast .- The ballast used is either shingle or broken stone.

Fencing.—The main line, the Irrawaddy line and the Bassein-Henzada line are fenced. The Mu Valley line is generally unfenced, except at a few stations. The Mandalay-Kunlong section is unfenced.

Carres.—On the main line (Rangoon to Mandalay), the sharpest curve has a radius of 573 feet, on the Rangoon-Prome section of 1,146 feet. The sharpest curves on the Bassein-Henzada, Letpadan-Tharawaw, Meiktila-Myingyan and Sagaing-Alon branches have radii of 955, 1,432, 1,273 and 2,865 feet, respectively; on the Lashio branch of 337 feet; on the Mu Valley line, the Katha branch and the Nankan-Mohnyin section of 573 feet.

Gradients.—The ruling gradient on the main line is 1 in 200, uncompensated; on the Lushio branch it is 1 in 25, compensated; on the Mu Valley line 1 in 60, uncompensated; on the Myingyau branch, 1 in 100, uncompensated; on the Sagaing-Alon branch, 1 in 150, uncompensated, and on the Katha branch, 1 in 50, compensated.

#### Torms of contract-

The railways are worked under the following contract :-

Contract of-9th March 1897 (between the Secretary of State and the Borma Railways Company) for transfer and management.

The general conditions of the contract are as follows:-

Government aid,-Interest is guaranteed at 2½ per cent, on the Company's share capital. Land was provided free.

Currency of contract.—Government may determine the contract, after giving six mouths' notice, if the Company fails to perform its obligations, or if the undertaking be, in the opinion of the Secretary of State, in course of gross mismanagement by the Company, or if it be worked at a loss for three consecutive half-years. Government may also determine the contract on the 31st December 1921, or at the end of any succeeding tenth year, by giving twelve months' previous notice. On the determination of the contract from any cause the Secretary of State is to repay to the Company in sterling at par the capital raised by the latter.

Power of Company to surrender contract .- Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts in each half-year are to be applied in payment to Government of—

(1) the equivalent of the interest paid for the half-year on any debentures issued by the Company;

(2) the equivalent of the guaranteed interest at 2½ per cent. per annum on the Company's capital of £2,000,000, and of the interest payable on any additional share capital raised by the Company;

(3) the equivalent of interest at  $2\frac{1}{3}$  per cent. per annum on the sterling equivalent of the capital expenditure by Government on the railways up to the date of the transfer, and of interest on any additional moneys supplied by Government.

After payment of the interest above mentioned, any surplus which may remain unpaid in a year ending on the 30th June to be divided between Government and the Company in the proportion of four-fifths to the former and one-fifth to the latter.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

History of railways constructed and in progress. [For Index see page 112.]

Number Main head 15 Sub-heads (a) and (b). BURMA RAILWAYS SYSTEM—concld.

15. (a) Burma railways proper (3' 33" gauge)—concld.

Statistics of working-

-		-								TABLE I.				TAB	LE II.
·		Cale	ndar	year.			Capital outlay to end of year.	Gross earnings.	Net carnings.	Per cent. on capital outlay.	Interest.	Company's share of not earnings.*	Gain or loss to the State	Earnings per mile per week.	Proportion of expenses to earnings.
							Rs.	Rs.	Rs.		Rs.	Rs.	Re.	Rs.	İ
1877 1878 1879 1880	:	:	:	:	:	:	 1,22,86,59 <b>7</b> 1,25,97,310	 9,55,919 13,22,€10	 1,41,713 5,21,685	 1:11 4:11	 5,17,138 5,62,331			61 115 114 138	129·36 93·03 85·17 60·60
1881 1882 1883 1884 1885	:	:	:	:	:	:	1,36,51,092 1,78,39,222 2,19,77,689 2,56,37,089 2,72,85,343	15,43,622 15,75,691 15,62,586 21,05,421 21,63,656	6,45,077 6,30,430 5,60,766 8,21,036 4,73,123	4·73 3·53 2·55 3·21 1·73	5,86,210 6,23,969 7,46,068 9,69,215 10,61,184	::: ::: :::	+58,867 +6,461 -1,95,302 -1,47,279 -5,88,061	181 168 187 181 143	58·21 59·99 64·66 60·96 73·18
1886 1887 1888 1889 1890	:	:	:	:	:	:	2,88,52,604 3,66,52,847 4,83,73,677 5,12,49,158 5,56,22,296	26,57,955 83,21,263 33,76,218 46,90,263 54,71,432	9,41,149 15,58,803 12,71,960 15,73,552 23,48,191	8·26 4·25 2·63 3·07 4·23	12,64,242 18,15,249 18,18,560 20,17,224 21,65,808	   	-3,23,093 +2,43,054 -5,46,600 -4,43,672 +2,12,863	156 194 171 169 210	64-51 53-12 62-33 66-45 57-08
1893		:	:	:	:	:	6,03,31,289 6,64,02,875 7,03,47,005 7,37,14,721 7,57,23,659	58,55,197 71,00,618 67,32,506 62,87,354 67,11,062	23,71,392 33,86,044 22,42,493 23,23,328 27,92,356	3:96 5:10 3:19 3:15 3:57	23,29,237 24,90,221 27,19,005 28,94,375 30,91,163	::: :::	+ 43,105 + 8,95,867 - 4,77,503 - 5,71,047 - 2,98,807	199 237 178 161 160	59:50 52:31 66:64 63:05 59:73
1896 1897 1898 1899 1900	:	:	:	:	:	:	8 13,44,229 8,73,31,890 9,24,93,509 10,11,17,647 11,93,96,635	74,08,558 86,76,403 89,91,451 88,25,724 1,10,29,947	29,85,751 38,82,673 57,88,523 35,79,407 48,94,524	3:67 4:45 4:16 3:54 4:13	31,43,142 28,31,674 39,49,899 38,35,209 38,49,026	1,63,877 1,61,076 1,21,994 3,47,606	-4,57,691 -1,11,878 -3,22,152 -3,81,796 +6,98,192	167 158 184 179 195	60·76 55·25 57·87 59·45 55·62
1901 1902 1903 1904 1905	:	:	:	:	:	:	11,09,22,468 12,70,23,590 13,01,80,277 13,38,28,678 13,55,91,056	1,18,85,329 1,25,02,671 1,36,11,478 1,51,02,418 1,57,75,957	19,89,676 52,72,683 52,19,322 65,70,760 61,81,063	4:16 4:66 4:01 4:92 4:56	40,41,108 43,94,423 44,06,500 44,71,268 45,35,974	4,42,439 4,69,365 4,32,246 5,92,997 6,77,542	+ 5,06,109 + 4,08,495 + 3,80,576 + 15,06,495 + 9,67,547	197 203 197 216 226	59·02 57·83 61·66 56·40 60·81
1906				•		•	13,97,87,368	1,57,32,105	58,61,913	4:19	46,13,199	5,66,021	+6,82.393	225	6274

#### 15 (b) Burma railways extensions (3' 33" gauge)-Dotails of construction-

There are two lives under construction, viz., (1) Pegu to Martahan, 12127 miles, which was sanctioned in 1903; and (2) Henzada to Kyangin, 65.66 miles, sanctioned in 1904.

Number Main head 16. DEOGHUR RAILWAY (3' 33" gauge)—

### Details of construction-

This line connects Deoghur with Baidyanath, a station on the East Indian Railway, and is 4.79 miles long. It was sanctioned in 1881 and opened in 1882.

Permanent-way.- The permanent-way is laid with 36-lb. steel rails on wooden sleepers.

Ballast .- The line is ballasted throughout.

Fencing .- The line is unfenced.

Curves .- The sharpest curve has a radius of 2,640 feet.

Gradients .- The ruling gradient is 1 in 60.

#### Terms of contract-

The railway is worked under the following contract:-

Contract of-12th July 1883 (between the Secretary of State and the Deoghur Railway Company) for construction, maintenance and working.

The general conditions of the contract are as follows:-

Government aid .- Land was provided free of charge.

Terms of contract.-Messrs. Burn & Co. constructed the railway with capital raised locally and without any guarantee.

Currency of contract. - If the Company fails to perform its obligations Government may after giving six months' notice, determine the contract, and take over the railway at a valuation based on the carnings of the two years immediately preceding. Government may also, after the railway has been opened for traffic for 30 years, and thereafter at terms of 10 years, by giving 12 months' notice, determine the contract and take the railway over at a valuation calculated at the average market rate of the shares during the previous three years, giving the Company in addition a bonus not exceeding 20 per cent. of the value so arrived at.

Rates and fares. -- Certain maxima have been fixed within which the Company is permitted to vary rates.

<sup>•</sup> Based on actual receipts and payments during the year.

## History of railways constructed and in progress.

[For Index see page 112.]

Number Moin head 16 Sub-head (a) DEOGHUR RAILWAY (3' 33" gauge)—concld.

#### Statistics of working-

						,								-	Таві	.н.I.		TABL	s II,
·					alen	lar ye	par.							Capital ontlay to end of each year.	Gross earnings.	Not carnings.	Per cont, ou capital outlay.	Earnings per milo per week.	Proportion of expenses to carnings.
1888 1884 1885	:	:	:	:	:	:	:	:	:	:	:	:		Rs. 2,73,331 2,75,060 2,75,000	Rs. 19 639 23,735 23,987	Rs. 6,242 10 704 9,908	2·28 3·90 3·60	Rs. 79 83 68	68:00 51:90 58:69
1886 1887 1888 1889 1890	:	:	:	:	:	:	:	:	:	:	:	:		2,75,043 2,75,043 2,51,180 2,52,576 2,82,616	25,017 24,539 95,812 28,539 26,095	11,743 12,108 11,521 12,695 10,915	4:27 4 10 4:10 4:49 3 86	100 98 104 115 105	53:06 50:64 55:37 55:51 58:17
1891 1892 1893 1894 1895	:	:	:	:	:	:	:	:	:	:			1	2,82,752 2,88,829 2,87,364 2,57,526 2,55,086	31,165 26,964 37,569 29,425 33,611	15,429 9,707 19,103 9,659 15,068	5·16 3 37 6·65 3·36 5 31	125 108 152 118 130	50:49 64:00 49:47 67:17 51:46
1896 1897 1898 1899 1900	:	:	:	: :	: :	:	:	:	:	:		:		2,87,797 2,87,942 2,68,453 2,-7,525 2,87,379	30 014 30,320 32,40 33 262 34,900	11,493 11,152 6,601 6 618 7,376	4 00 3:87 2:28 2 32 2:56	120 122 129 134 140	61:69 63:22 79:14 79:02 78:87
1901 1902 1903 1904 1905 1906	:	:	•	:	•	:	:	:	:	:	:	:		2,91,265 3 01,057 3,01,057 3,01 057 3,00 553 3,01,256	48 2 03 29,758 40 4/8 46,695 45 39 <b>7</b> 53,502	18,616 6 0 5 10,623 14,701 15,5:2 20 553	6:53 2:00 3:53 4:83 4:12 6:82	191 110 162 187 182 215	61°45 79°75 73°75 68°48 70°08 61°61

Number  $\frac{\text{Main bend 17}}{\text{Sub-heads }(a) \text{ and }(b)}$ .

#### DIBRU-SADIYA RAILWAY SYSTEM-

Chairman .- Lord Ribblesdale.

Secretary .- Evan A. Jack, Esqr.

Offices .- 85 London Wall, London, E.C.

Lines comprising the system.—The Dibru-Sadiya railway system is made up of-

			•	Open line.	or sanctioned for construction.	Total.
				Milos.	Miles,	Miles.
(a) Dibru-Sadiya railway (3'3}" gange)				77 50	8:52	86 02
(b) Ledo and Tikak-Maigherita Colliery railway (3' 31" gauge)				8.50		8.20
	Tota	ıl		86 0)	8 53	94.52

## 17 (a) Dibru-Sadiya railway proper (3' 34" gauge)-

## Details of construction-

This line is 77.50 miles long and may be divided into main line (Dibrugarh to Dihing Brilge), 61.50 miles, and the Talap branch, 16 miles. Its construction was sanctioned in 1881 and it was opened through in 1885.

There are, in addition, 8:52 miles under construction.

Permanent-way.—The line is laid with 411-lb. and 50-lb. flat-footed steel rails. The sleepers are uriam and cast iron plate of the Denham-Olpherts' type.

Ballast .- The line is partially ballasted with broken stone.

Fencing .- The line is unfenced, with the exception of a short length at Dibrugarh. ..

Curves .- The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient is 1 in 150.

#### Terms of contracts-

The railway is worked under the following contracts:-

Contracts of -26th May 1880 (between the Secretary of State and the Assam Railway Company subsequently called the Assam Railways and Trading Company) for maintenance and working.

25th July 1881-Contract modifying that of 1880.

The general conditions of the contracts are as follows :-

Government aid.—Government guaranteed the payment of a subsidy, not exceeding in any year Rs. 80,000 twelve months after the opening of the main line or after each succeeding twelve months until the end of twenty years after opening, equal, together with the net earnings of the main line, to 5 per cent. of the paid up capital of the main line. Government similarly guaranteed a subsidy for the Makum branch, not exceeding Rs. 20,000 in any year. The payment of guarantee terminated on the 30th June 1903. The free use of public roads is also provided for.

Currency of contract.—If the Company fails to fulfil its obligations, within thirty days after notice, Government can take possession and execute all repairs and works for the efficient working of the railway. Government may

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 17 DIBRU-SADIYA RAILWAY SYSTEM—contil.

## 17 (a) Dibru-Sadiya railway proper (3' 32" gauge)—concld.

#### Terms of contracts-concld.

determine the contract, on giving 12 months' notice (clause 19 of contract, dated 26th May 1880), at the expiry of the first five years after date of opening, and at subsequent intervals of five years, by paying twenty per cent. in excess of the value of the Company's property.

Norg.—The Company having waived all its rights under clause 7 of contract dated 25th July 1831 to construct railways within the Lakhimpur District, Government have waived their right to purchase the railway before 1921, or at intervals of 10 years thereafter (Secretary of State's letter No. P. W. 2731, dated the 23rd December 1901).

Power of Company to surrender contract .- Nil.

Terms of working.—The Company to maintain the railway and the road on which the rails are laid and the rolling stock and other equipments to the satisfaction of the Secretary of State and to carry on the work of common carriers.

Rates and fares.—These were subject to approval by Government from time to time while subsidy was payable. If the net profits exceed 12 per cent. of paid up capital, Government may order such reduction of tariff and rates as may be considered necessary, such reduction not lessening the net profits below 12 per cent.

#### Statistics of working-

						TABLE I.			•		TAI	AR II.	
Caler	ıdar	year.	•	Capital outlay to end of each year.	Gross oarnings.	Not	Percentage on onputal outlay,	Subsidy from local Govern- ment.	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to cornings.	
1883 . 1884 . 1885 .	:	:	:	Rs. 22,22,253 40,65,288 49,46,729	Rs. 48,220 2,06,133 2,57,335	Rs. 35,375 68,406 63,864		Re 54,550 54,500	Rs. -35,375 -18,856 -9,364		R4. 52 67 62	171: <b>7</b> 9 131:61 123:03	
1886 . 1887 . 1888 . 1889 . 1896 .	:	:		49,73,753 53,32,605 53,73,445 55,18,750 57,05,682	3,46,479 4,01,928 1,25,530 4,64,018 5,14,266	53,154 1,02,540 1,01,759 1,25,147 1,76,960	1.67 1.92 1.89 2.27 3.10	54,654 1,00,000 1,00,000 1,00,000 1,00,000	1,07,808 2,02,510 2,01,759 3,25,147 2,76,950	2:17 3:80 3:75 4:08 4:85	81 94 105 114 127	80°65 74°68 76°09 73'03 65°59	
1891 1892 . 1893 . 1894 . 1895 .	:	:		67,05,474 69,56,304 71,70,562 70,97,487 71,02,729	4,98,682 5,13,213 5,12,098 5,31,645 6,01,142	1,70,526 1,63,719 1,52,972 1,95,732 2,69,543	2 54 2 35 2 13 2 76 3 61	1,00,000 1,00,00 1,00,000 1,00,000 1,00,000		4*03 8*79 9*53 4*17 4*99	123 127 127 132 149	63:18	
1896 - 1897 - 1898 - 1899 - 1900 -	:	:		74,01,496 74,20,119 74,10,474 74,56,183 77,14,349	6,47,360 7,74,189 7,81,415 8,59,414 9,00,847	3,12,286 2,64,750 2,82,478 4,10,699 4,62,381	4°22 3°57 3°80 6 03 5°99	1,60,660 1,00,000 79,000 37,978	4,12,286 3,64,750 3,32,475 4,87,666 1,62,381	5:57 1:99 1:33 6:64 5:99	161 192 194 218	51:76 68:12 63:55 47:68 45:67	The amount
1901 . 1902 . 1903 . 1904 . 1905 .		:		82,00,747 62,00,694 82,32,530 87,01,363 87,31,147	9,28,578 8,51,880 9,16,777 9,48,173 9,54,293	4,73,307 4,11,187 4,57,974 4,21,317 4,92,053	5:77 5:01 5:56 4:54 4:95	  	4,70,307 4,11,187 4,57 974 4,21 317 4,32,053	5:77 5:01 5:56 4:84 4:95	230 211 227 235 237	19:03 51 73 50:05 55:58 54:73	sidy received during 1899 was due for a previous pe- riod.
1906 .				88,18,873	10,08,281	4,07,634	1.63		4,08,634	4 63	250	59*47	

#### 17 (b) Ledo and Tikak-Margherita Colliery railway (3' 3)" gauge) —

The line was used originally only for the purposes of bringing coal from the mines on the south bank of the Dihing river to the Dibru-Sadiya railway. It was constituted a railway and its working was taken over by the Dibru-Sadiya railway from the 1st January 1897.

#### Details of construction-

The line is 8:50 miles long, viz., main line (Dihing bridge to Lodo) 5:59 miles, and branch (Margherita to Namdang) 3 miles. The main line was opened in 1884 and the branch in 1901.

Permanent-way.—The line is laid with 50-lb. flat-footed steel rails on uriam sleepers.

Ballast .- The main line is three-fourths ballasted with broken stone, but the Naundaug branch is unballasted.

Fencing.—The line is unfenced.

Curves .- The sharpest curve is of 800 feet radius.

Gradients .- The ruling gradient is 1 in 100.

#### Terms of contract-

The railway is worked under the following contract:-

Contract of—30th July 1881 (between the Secretary of State and the Assam Railways and Trading Company) for coal and iron mining in the Makum coal fields and for the construction of a railway or tramway to effect a junction with the railways which may be constructed to the bank of the Dihing river.

Terms.—Contained in Government of India, Public Works Department, No. 623 R. T., dated the 6th August 1896.

## History of railways constructed and in progress [For Index see page 112.]

Number Main head 17 Sub-heads (a) and (b). DIBRU-SADIYA RAILWAY SYSTEM-concld.

17 (6) Ledo and Tikak-Margherita Colliery railway (8' 33" gauge)—concld.

Terms of contract-concld.

The general conditions are as follows:-

Government aid .- Nil.

Currency of contract.—The coal concession is for a term of 20 years from 30th July 1881 within an area of 30 square miles, and for a further term of 30 years within an area of at least 4 square miles.

Power of Company to surrender contract .- Nil.

Terms of working .- The colliery to be charged with the cost of maintenance of the branch and sidings owned by it and 5 per cent. of its gross earnings for the use of rolling stock; all other charges for working the open line to be divided between the railway and colliery in proportion to their respective gross earnings.

Rates and fares .-- Certain rates and fares have been sanctioned by Government.

#### Statistics of working-

												1	TAI	tre l	ī.				Таві	E II.
train to:					(	Calene	lar y	oar.		•	r		-		Capital outlay to end of each year.	Gross earnings	Net carnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to carnings.
	-			-										-	Rs.	Rв.	R4.		Rs.	
1897 1898 1899	:	:	:	:	:	:	:	:	:	:	:	:	:		12,83,416	45,871 55,313 63,084 65,724	8,024 3,752 22,053 17,981	0·70 0·31 1·72 1·40	142	82·51 93·29 65·04 72·64
1901 1902 1903 1904 1905	:	:	:	:	:	•	:	: :	:	:	:	:	:	:	16,30,162 16,3,446 16,62,082 16,62,688 16,78,156	70,293 58,259 59,077 56,108 4 59,439	11,145 437 -8,208 13,158 27,210	0 68 0 09  0 79 1 62	120 102 103 120 127	84·15 99·25 113·89 76·55 54·23
1906						•									16,83,031	65,115	25, <b>05</b> 2	1:49	139	61.52

#### Main head 18 Number Main head 18 Sub-heads (a) to (c). JODHPUR-BIKANER RAILWAY SYSTEM—

Lines comprising the system.—The Jodhpur-Bikaner railway system is made up of-

										Miles.
(a) Jodhpur-Bikaner (Jodhpur section) (3' 3}" gauge)			• '							463.89
(b) Jodhpur-Bikaner (Bikaner section) (3' 3 " gange)										245.85
(c) Jodhpur-Hyderabad railway (British section) (3' 33"	gaugo)			•	•	•	•		•	123.98
								Tot	al	833-22

Open line.

#### 18 (a) Jodhpur-Bikaner (Jodhpur section) (3' 33" gauge)-

#### Details of construction --

The open mileage of the section is 463:39 miles. First sanction to construction was accorded in 1881 and the line was opened through to the British frontier in 1900. The Merta city branch was opened in 1905.

Permanent-way.—'The line is laid with 36-lb., 414-lb. and 50-lb. flat-footed steel rails. There are also some 36-lb. iron rails in the Merta city branch. The sleepers are steel trough, deodar and pine.

Ballast.-On the greater portion of the line the ballast consists of coarse sand, kunkur and broken stone.

Fencing.—With the exception of a few stations, the line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

### Terms of contracts --

The railway is worked under the following contracts:-

Contracts of -13th July 1889 (between the Government of India and the Jodhpur and Bikaner Durbars) for constructing and working the line.

The general conditions of the contracts are as follows :-

Government aid .- The line is the exclusive property of the two Durbars.

Currency of contracts.—These contracts may be medified at any time by mutual consent.

Terms of working. - Each Durbar to receive all the profits of the section of line belonging to that Durbar.

Rates and fares.-No provision was made for rates and fares in the contracts, but certain rates and fares were approved by executive order.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 18 Sub-heads (a) to (c). JODHPUR-BIKANER RAILWAY SYSTEM—contd.

18 (a) Jodhpur-Bikaner (Jodhpur section) (3' 3\square gauge)-concld.

Statistics of working-

	TABLE I.														Table II.			
	Calendar year.												Oupital outlay to end of each year.	Gross earnings.	Not carnings.	Per cent, on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings
1883 1684 1885 1886 1887	:	:	:	:	:	:	:	:	:	:		. :	Rs. 4,99,966 8,09,995 15,40,395 21,22,593 22,81,433	Rs. 40,361 64,262 1,70,691 2,03,728 3,18,703	Rs. 23,110 31,748 1,12,505 1,33,318 1,91,677	4:62 3:92 7:30 6:23 8:40	Rs. 42 39 54 62 55	42·74 50·59 34·30 35·20 39·86
1888 1889 1890 1891 1892	:	:	:	:	:	:	:	:	:	:	:	:	22,80,006 22,73,978 22,73,388 41,87,110 60,59,552	3,60,803 3,59,358 3,70,825 6,12,839 9,46,980	1,91,556 1,92,258 1,96,192 3,34,364 5,28,941	8·40 8·45 8·63 7·99 8·73	56 56 58 66 74	46-91 46-50 47-09 45-44 44-14
1893 1894 1895 1896 1897	:	:	:	:	:	:	:	:	:	:	:	•	64,74,611 64,49,374 64,32,981 61,78,328 74,90,176	8,31,765 10,81,156 9,74,738 11,64,465 11,22,658	4,33,895 6,69,373 6,69,246 7,38,273 7,44,799	6·70 10·38 8·85 11·40 9·94		47-83 88-09 41-60 36-90 33-66
1898 1899 1900 1901 1902	:	:	:	:	:	:	:	:	:	:	:		1,00,95,594 1,13,42,183 1,14,29,508 1,17,24,896 1,18,69,421	12,22,726 19,09,097 16,28,478 15,67,073 16,76,216	7,30,956 11,66,844 9,07,480 7,14,836 8,35,202	7·25 10·29 7·94 6·10 7·04	102 81 66	42:22 38:88 44:27 54:39 50:17
1903 1904 1905 1906	:	:	:	:	:	: :	:	:	:	:	:	:	1.19,31,439 1,21,90,840 1,22,63,774 1,22,77,015	16,34,708 16,87 604 19,16,254 20,91,368	8,91,196 9,58,365 11,01,294 12,23,531	7·17 7·86 8·98 9·97	71	45·48 48·21 42·58 41·50

# 18 (4) Jodhpur-Bikaner (Bikaner section) (3' 3% gauge)—

## Details of construction-

The section is 245.85 miles long. Its construction was first sand ened in 1890 and it was opened through to Bhatinda in 1902.

Permanent-way.—The permanent-way consists of 36-lb, flat-footed steel rails on steel trough and deodar sleepers.

Ballast.—The ballast consists of coarse sand and small kunkur, except on the Suratgarh-Bhatinda section where it is broken brick and kunkur.

Fencing.—The line is unfenced, except at a few stations.

Curves.—There are no curves with a radius of less than 1,000 fect.

Gradients.—The ruling gradient is 1 in 150.

#### Terms of contracts-

See under Jodhpur section, 18 (a).

											Тав	t.B ]	•				Table II.		
	Caloudar year.										-		Capital outlay to end of each year.	Gross earnings.	Net' carnings.	l'er cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	
890 891 892 893 894 896		:	:	:	:	:	:		:	:	•	: : : : : : : : : : : : : : : : : : : :	Rs. 4,15,590 14,32,706 9,48,622 9,65,71 9,69,407 9,71,084 9,73,294 9,73,473	Re	Rs. 2,724 24,904 25,735 40,447 45,096 75,382 66,504	0°19 2°63 2°06 4°17 4°64 7°75 6°73	Rs36 34 30 35 38 53 53	46-99 67-47 61-43 49-61 47-89 37-56	
897 898 <b>899</b>	:	:	:	:	:	:	:	:	:	:	:	:	23,14,152 28,61,917	1,17,010 1,37,472 1,74,599	77,616 1,01,341	3·35 3·65	31 37	44.02 43.54 40.22	
900 901 902 908 904	:	:	:	:	:	:	:	:	:	:	:		32,60,432 48,93,535 52,49,839 51,30,925 50,93,549	1,92,858 2,46,875 3,22,022 5,25,329 7,23,901	1,04,962 1,05,697 1,42,580 2,66,197 4,05,677	8-22 2-16 2-72 5-19 7-96	43 30 30 41 57	45*48 57*18 55*79 49*88 48*96	
905 9 <b>9</b> 6	;	:	:	:	:	:	:	:	:	:.	:	:	51,72,40 <b>6</b> 82,70,205	8,83,432 10,92,838	5,62,383 4,74,513	10 <sup>.</sup> 87 9 <b>.00</b>	69 86	36·84 56·56	

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 18 Sub-heads (a) to (c). JODHPUR-BIKANER RAILWAY SYSTEM—concld.

#### 18 (c) Jodhpur-Hyderabad (British section) (3' 3\square) gauge)-

#### Details of construction-

The line connects Hyderabad (Sind) with the Jodhpur system and is 123 98 miles long. Its construction was first sanctioned in 1891 and it was opened through in 1900.

\* Permanent-way.—The section is laid with 60-lb, iron, and 50-lb, and 411-lb, flat-footed steel rails on deoder and Denham-Olpherts' cast-iron sleepers.

Ballast .- The ballast is of kunkur, stone and broken brick.

Fencing.—With the exception of a few stations, the line is unfenced.

Curres.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

#### Terms of contract-

The railway is worked under the following agreement:-

Agreement of—22nd December 1900 (between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner) for the construction of a railway, on the 3'3\frac{1}{3}" gauge, from Balotra to Hyderabad and for working the section from the Jodhpur Frontier to Hyderabad.

The general conditions of the agreement are as follows: -

Currency of agreement.—As regards the working of the railway this agreement remains in force until determined by either-party, on 12 months' notice, on the 1st day of January or the 1st day of June in any year.

Terms of working.—Working expenses, excluding maintenance, are divided between the British and Native State sections in the ratio of the gross earnings of each section. Maintenance charges to be actual cost for each section of line.

Rates and fares.—Maximum and minimum rates and fares and the classification in force on the North Western (State) railway from time to time to be in force on the British section.

NOTE.—Government of India, in letter No. 255 R. T., dated the 6th March 1900, approved of the Rajputana-Malwa railway classification of goods which is in force on the Native State section being adopted on the British section, the stipulation in agreement requiring the adoption of the North Western (State) railway classification remaining undiffered in case it may be considered desirable to enforce it bereafter.

#### Statistics of working-

								TABLE	Ι					TABLE I	ι.
	. (	Calend	ar y	ear.	<b></b>		Capital outlay to end of each year.	Gress carnings,	Net orrnings.	Per cont. on capital cutlay	Tuteros <b>t.</b>	Gain or loss to the State.	Earnings per mile per week.	Proportion of exponses to carnings.	Remarks.
							Ks.	Rs.	Rs.		Ra.	Rs.	Rы.		
1801						- 1	2,31,401	200.200	* 0 ***		5,356	-5,356		200.00	
1892						.	16,31,818	33 206	-1,919		59,649	-61,598	29	105:87	The figures of
1893 1894	•	• •			•	. 1	16,61,091	1,30,817 1,45,222	16,171 36,062	0.99	65,767 63,940	-49 296 -32,878	43 47	87·11 75·17	capital outlay in 1900 include the
1895			•		•	٠,١	17,27,619	1,68,139	46,100	2 63	71,080	-24,471	55	72.28	outlay on the Hy-
1000		٠,٠		•	•	. 1	17,74,095	1,00,100	40,00	- 00	71,000	-24,371	"	12 20	derabad-Rahoki
1896						!	18,00,799	1,87,503	64,376	3.57	71,420	-7.011	61	65.67	section.
1897		: :			:	: 1	18,37,796	2,05,182	59,113	3.33	73,552	-14,139	67	71.04	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1898			,			- 1	20,19,772	3 22,647	70,1.9	3 17	77,553	-7,391	73	68.49	The gain to the
1899						. 1	33, 19,948	3,25 212	88, 103	2.64	1,07,380	18,917	74	60.73	State in 1901 was
1900						. 1	11,71,100	1.93,211	65,923	1 10	1,78,081	-1,13,051	65	65.93	due to the com-
						- 1		1		! .			ł		plotion of the line
1901				,		{	38,81,861	1,21,307	1,73,567	4 17	1,52,129	+ 21,138	66	59.09	which was pre-
1902						.	10,45,979	5,64,008	2,18,314	5 (1	1,59,771	+ 59.043	78	56.59	viously only par-
1903						- 1	10, 15, 338	5,81,094	2,62,379	640	1,60,179	+1,02,200	91	55.08	tially open.
1904						· i	39,58,681	6,49,728	3,45 006	8 72	1,54,816	+1.90,160	101	46.82	1
1905			•		•	. }	39,67,913	7,23,989	3,69,002	9 30	1,58,622	+2,10,380	112	49.03	1
1000							40 20 005	0.01.423	F 11 000	10.50	1 77 770	0.54.100		40,00	i
1906					•		<b>40</b> ,70,6°5	8,91.456	5,11,938	12.28	1,57,778	+3,54,160	138	42'57	1

Number Main head 19 Sub-head (a) . MORVI RAILWAY (3' 3 g" and 2' 6" gauges)-

The 2' 6" gauge connection between Wadhwan and Rajkot by this railway has been converted to the 3' 33" gauge—from Wadhwan to Than Road, 31:34 miles, on a new alignment and onwards to Rajkot, 42:60 miles, on the original alignment with a few unimportant diversions. The line between Vankaner and Morvi has been retained on the 2' 6" gauge.

#### Details of construction-

The line is 9464 miles long, divided into the 3' 34" gauge section (Wadhwan to Rajkot), 73:94 miles, and the 2' 6" gauge section (Vankaner to Morvi and a quarry siding), 20:70 miles. The construction of the 3' 34" gauge section was sanctioned in 1902 and this section was opened in 1905. The construction of the 2' 6" gauge section was sanctioned in 1883 and it was opened in 1887.

Permanent-way.—The permanent-way on the 3' 3\geq gauge section consists of 41\frac{1}{4}\text{-lb. flat-footed steel rails on half round teak and crossoted pine sleepers; and that on the 2' 6" gauge section consists of 29\text{-lb. flat-footed steel rails on crossoted pine sleepers.

Ballast. The line is ballasted with moorum (disintegrated) trap.

Fencing .- The line is unfenced.

Curves.—The sharpest curve on the 3' 33" gauge is of 950 feet radius; and that on the 2' 6" gauge is of 300 feet radius.

Gradients.—The ruling gradient is 1 in 150 on both gauges.

#### Terms of contract -

The Morvi railway is owned by His Highness the Thakore Schib of Morvi, and is under his control.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main ead 19 Sub-head (a). MORVI RAILWAY (3' 38" and 2' 6" gauges)—concl.

Statistics of working-

											TAI	31.R	I.				TABI	æ 11.
				c	alono	lar y	oar.			•			Capital outlay to end of each year.	Gross earnings,	Net errones,	Per cent on expit d outlay,	Earnings per mile per w. ek.	Proportion of expenses to earnings
1886 1887 1888 1889 1890	:	:	:	:	:	:	:	:	:	:			Rs, 6,88,671 11,96,700 11,77,842 12,46,860 20,25,863	Rs. 31,523 1,29,107 1,62,687 1,7,321 2,05,227	Re. Not available. 16,994 21,984 76,727 87,550	1:54 1:57 4:15 4:102	Ra. 30 39 46 50 60	103:28 86:87 86:44 68:01 70:84
1891 1892 1893 1894 1895	:	:	:	:	:	:	:	:	:	:	:	:	20,55,599 21,01,519 21,57,765 22,23,526 23,99,096	3,09,419 3,09,171 3,22,818 3,20,348 3,59,572	1,08,617 1,50,370 1,47,52 1,47,667 2,00,127	5:28 6 19 6 .6 6 42 8:01	63 63 66 65 75	64:90 57:83 54:86 55:46 45:91
1896 1897 1898 1899 1909	:	:	:	:	:	:	:	:	:	:	:	:	23,82,315 21,76,757 24,79,448 25,06,414 27,28,115	0,86,833 1,27,153 0,76,220 4,10,456 4,23,308	1,81,621 2,11,642 1,63,990 1,70,053 1,55,794	7:60 8:55 6:61 6:78 5:52	79 77 77 86 87	53:06 50:19 50:41 59:56 62:49
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:	:	:	:	•	27,59,152 27,32,748 27,88;452 34.06 fed 43,90,817	3,65,663 3,05,659 2,98,663 3,14,636 3,23,640	1,21,534 1,13,200 1,44,749 1,88,06,9 1,74,476	4 55 9 16 5 19 5 55 3 97	73 63 61 73 69	65-00 62-86 51-44 46-73 46-99
906		•											44,90,459	3 07,560	1,59,584	3 55	62	48-11

Number Main head 20 ROHILKUND AND KUMAON RAILWAY SYSTEM—

Chairman. - Sir Charles Turner, K.C.I.E.

Managing Director - Alexr. Izat, Esq., C.I.E., M.I.C.E.

Offices -237 Gresham House, Old Broad Street, London, E.C.

Lines comprising the system.—The Robilkund and Kumaon railway system is made up of-

							Open line.	Under construction or sanction d for con truction.	Total,
							Miles.	Miles.	Miles.
(a) Robilkund and Kumaen radway (3' 3)	" gang	u)					117.87	84.12	201:99
(b) Lucknow-Barcilly railway (3' 32" gauge							237.01	100	237.04
(c) Powayan Light railway (2' 6" gauge)							39.20	•••	39-50
			•					**********	
					To	tal	301:41	81:12	478.53
OOW/OFF									

### Running powers-

Home line over foreign line-

			Miles.	
Bhojeepura to Carollly, Lucknow-Barellly railway, for passenger and goods trains			12 00	
Foreign line over home line-				
Rongal and North-Western, Daligani to Aishlagh, for passenger and goods trains	_	_	 3:40	

### 20 (a) Rohilkund and Kumaon railway proper (3' 35" gauge)-

#### Details of construction-

The open mileage of the Robilkund and Kumaon railway proper is 117.87 miles, made up of (1) main line, Bhojeepura to Kathgodam, 53.92 miles and (2) the Bareilly-Kasganj section, 63.95 miles.

The main line was sanctioned for construction in 1882 and opened in 1884. The portion of the Barcilly-Kasganj section from Barcilly to Soron was sanctioned in 1903 and opened in 1906 and the portion from Soron to Kasganj was taken over from the Rajputana-Malwa railway in 1906.

There are 84:12 miles under construction, viz., (1) the M. radabad-Ramnagar branch, 47:69 miles; and (2) the Lalkua-Kashipur branch, 36:43 miles. The construction of these branches was sanctioned in 1903.

Permanent-way.—The permanent-way consists of 50-lb. steel rails on sal sleepers.

Ballast .- The bullast consists of broken brick and shingle.

Fencing .- The line is partially fenced.

Curves .- There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 70.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 20 ROHILKUND AND KUMAON RAILWAY SYSTEM—contil.

20 (4) Rohilkund and Kumaon railway proper (3'35" gauge)-contd.

Terms of contracts-

The Robilkund and Kumaon and Lucknow-Bareilly radways are worked under the following contracts:-

Contracts of -12th October 1882 - Rehilkund and Kumaon Ruilway Company's original contract.

8th September 1890 .- Contract for the working and maintenance of the Lucknow-Bareilly railway and the Company's line as one system. (Principal contract.)

31st December 1892.—Relating to advances of capital by Government.
5th February 1901.—Contract modifying the terms of the previous contracts.

24th April 1903 .- Contract as to rate of exchange for purposes of contracts of 12th October 1882 and Sth September 1890.

15th July 1904 - Contract for construction of new branches and taking over a branch from Kasganj to Soron and other matters supplemental to contracts of 1882, 1890, 1901 and 1903.

The general conditions of the contracts are as follows:-

Government and .- Company's section .- Government guaranteed interest at 4 per cent. in sterling on the capital expended up to £200,000 until the line was opened for traffic, but not for longer than the first two years of the contract; thereafter a subsidy of Rs. 20,000 half-yearly for ten years from date of opining, which ceased on 31st December 1894. Land was provided free, subject to the condition that the Company pays on demand to Government the cost price of land purchased by the latter subsequent to the date of the principal contract.

Lucknow-Barcilly section.—The Company to raise £160,000 capital by debentures which Government guarantee as to repayment of capital and payment of interest, the Company undertaking to reimburse Government from its own funds any amount by which the guarantee may exceed the annual limit of Rs. 98.000. Land was provided free

of charge.

Note -All sums to be advanced by Government after the 31st December 1900 hear interest at the rate of 3) per cent, per annual under the agreement dated the 5th February 1901.

Terms of contract.—The Lucknow-Bareilly section was taken over in an unfinished state by the Company which raised the sum of £160,837 by the issue of debentures for the purpose of completing it. The remainder of the capital expended has been supplied by Government. The contract provides that the railway shall be worked in conjunction with the Company's own line, a joint account of working expenses being kept and the total amount divided half-yearly between the State line and the Company's line in proportion to their respective gross carnings.

Currency of contracts.

- (1) Robi/kund and Kumaon railway contract, -Government may terminate the contract at the end of the 30th year (i.e., on the 31st December 1912) or the 50th year (i.e., on the 31st December 1932), by giving 12 months' notice. If the contract terminates by such notice or by efflux of time, Government have to pay 25 times the average net earnings, deducting the Government share of surplus profits during the 5 years preceding the termination. Government may also determine the contract at any time on six months' notice, if the Company fails to observe its obligations, on payment of the value of permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment in which case the Company must remove its property within nine months from the termination of the contract, otherwise it becomes the property of the Government.
- (2) Lucknow-Barcilly railway.—Government may determine the contract on the 31st December 1907, or on the 31st December of any subsequent year, by giving twelve months' notice. In the event, however, of the original contract, dailed the 12th October 1882, terminating by efflux of time or under notice of purchase or notice of determination, this contract, ipso facto, also terminates at the same time. Government may also terminate the contract if the Company fails to observe its obligations after six months' notice. On determination of the contract Government resume possession of the State railway on payment to the Company of the amount of the capital received, or take over its liabilities with respect to such capital.

Power of Company to surrender contract .- Nil.

Terms of working.—Company's section.—During the period that the Government are liable to pay interest, after deducting working expenses, (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Miner Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision), the surplus profits, after repayment of the guaranteed interest, go to the Company. Subsequently half the surplus profits, after 5 profes, area to the year (within a limit of £5.000 for each half-year), has been appropriated to the Company, are to be applied in repayment to Government of arrears of guaranteed interest and interest thereon. The other half and any ultimate surplus to belong to the Company. After the year ending 31st December 1897 Government to receive half the surplus profits in excess of 6 per cent.

Note. - It has been agreed that, in calculating the surplus profits for division, sums received by the Company as its share of the surplus profits of the Lucknow-Barcilly railway shall not be taken into account.

Lucknow-Barvilly section.—The working expenses of the system, (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision), are divided between the Company's line and the State railway in proportion to their gross earnings, the profits of the State railway being applied (i) in meeting payment of interest on the debentures and of interest at 4 per cent, on any further capital supplied by the Company for the undertaking or advanced by Government; (ii) in payment to Government of interest at 4 per cent. on their capital in the undertaking; and (iii) the residue to be divided half-yearly between Government and the Company in the ratio of their respective shares of capital in the undertaking.

Any insufficiency of the profits to meet the charges under (i) that may be met by money supplied by Government shall be a cumulative preference charge against subsequent profits before division of residue.

Rates and fares. - Certain maxima and minima have been fixed within which the Company is permitted to vary

History of railways constructed and in progress. [For Index see page 112.]

Number Main head 20 Sub-bends (a) to (c). ROHILKUND AND KUMAON RAILWAY SYSTEM—contd.

20 (a) Rohilkund and Kumaon railway proper (3' 3%" gauge)—concld.

Statistics of working-

				TABLE I.				TA	nie II.	
Celen- dar year.	Capital outlay to end of each year.	Gross carnings.	Net earnings.	Percontage on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Earrings per mile per week.	Proportion of expenses to cara-	Remares.
1884 . 1885 .	R4. 19,40,266 21,71,124	Rs. 26,543 2,38,572	Ra. 1,734 40,153	0:69 1:85	Rs.  40,000	Rs. 1,734 80,153	3 69 0.00	Ra 51 68	95:16 66:40	The large in-
1886 . 1887 . 1888 . 1889 . 1890 .	28,52,962 22,91,619 23,40,100 23,96,624 20,37,223	3,00,191 3,19,274 3,31,092 3,72,270 3,14,834	88,832 76,800 1,02,120 1,20,135 1,11,003	3°35 4°36 5°01 5°45	40,000 40,000 40,000 40,000 40,000	1,23,832 1,16,800 1,42,120 1,60,135 1,51,003	5:50 5:10 6:97 6:69 7:11	86 92 96 107 90	58 75 63:42 57:46 56 93 52 04	eapital outlay since 1904 are due to the inclu- sion of expendi- ture on branches under construc-
1891 . 1892 . 1893 . 1894 . 1895 .	20,49,458 20,58,575 20,82,280 20,89,440 20,78,251	3,85,084 5,20,567 4,25,909 4,59,315 4,04,504	1,33,440 1,57,780 1,43,480 1,75,191 1,52,973	5:62 6:52 6:17 7:16 7:36	20,000 40 000 40,000 40,000 	1,53,445 1,97,780 1,83,180 2,15,191 1,52,973	7:49 9:61 8:80 10:31 7:06	112 127 124 134 134	58 22 54:17 56:78 52:91 62 19	tion; and the decreases in not earnings to the heavy outlay on relaying the name line and
1896 . 1897 . 1898 . 1899 .	29,79,863 21,20,418 21,42,552 21,48,313 21,53,125	4,26,905 4,23,720 4,62,308 4,05,623 4,37,572	1,54,595 1,73,184 2,21,899 2,84,020 2,23,048	7 43 8 17 10 36 10 89 10 59	  	1,54,595 1,79,184 2,21,899 2,34,020 2,28,048	7 13 8:17 10:36 10:89 10:59	125 124 135 136 156	63:79 50:33 52:24 49:74 48:64	(in 1906) also to the net earnings of the Barcilly- Soron extension having been ere- dited to capi-
1901 . 1902 . 1903 . 1904 .	22,09,423 23,33,911 25,59,790 48,55,575 93,34,589	3,84,314 4,19,626 4,13,147 4,18,787 4,40,664	2,09,896 2,18,57 2,20,405 2,21,103 1,54,126	9:50 9:34 8:51 5:15 1:65		2,09,896 2,18,017 2,20,405 2,21,103 1,54 1.26	9:50 9:34 8:51 5:15 1:65	112 146 171 122 128	45°38 46°83 46°65 46'41 65°02	tal.
1906 .	1,16,53,319	8,03,607	1,79,124	1.21		1,79,121	1.21	124	54:56	

# 20 (b) Lucknow-Bareilly railway (3' 33" gauge) -

Details of construction :--

The open incleage is 237.04 miles, and is divided into main line (Lucknow to Bareilly), 198.55 miles and branches 38.49 miles. Sanction to the construction of the main line was accorded in 1884 and it was opened through in 1891.

\*\*Permanent-way\*\*—The permanent-way\*\* consists of 41½-lb, and 50-lb, steel rails on sal sleepers.

\*\*Ballast\*\*—The ballast consists of broken bricks, kunkur and shingle.

Fencing.—The line is partially fenced.

Curves.—There is only one curve with a radius of less than 1,000 feet.

Gradients .- The ruling gradient is 1 in 100 except on the Dudhwa branch where it is 1 in 60.

Terms of contracts-See under Robilkund and Kumaon railway proper, 20 (a).

					TABLE	١.				1		TAB	ur II.		
Colene	lar yes	ar.	Capital outlay to end of each year.	Gross carnings.	Net carnings.	Per cent. on capital outlay.	Intorest.	Com- pany's shire of net earn- ings.*	Gain or loss to the State.	BARRILLA 3' Earnings per mile per week.	Pictonity 3.".  Pio · of exp to carnings.	LUCKNOW SERAM! Earnings per mile per week.	Provof exp. to carmage.	LUCKNOV LY, 3' Earnings per malo per week	
1883 1884 1885	:	:	Rs. 4,84,915 13,43,699 25,45,567	Rs.  10,2 9 82,827	Rs.  8/9 17,243	0.06 0 63	Re. 11,192 36,572 53,247	Rs. 	R4. - 11,192 - 35,733 - 36,001	Rs.  32	91:81 80:79	Rs. 		Rs	
1886 1887 1888 1889 1890	:	•	42,16,146 52,24,321 52,82,870 54,59,585 65,83,824	1,15,296 2,92,470 3,52,827 4,29,781 4,56,708	28,729 67,924 99,031 1,47,868 1,32,358	0.68 1.30 1.87 2.70 2.02	1,48,570 1,85,646 2,63,503 2,16,189 2,30,699	::: ::: :::	-1,19,841 -1,17,122 -1,04,472 -68,321 -98,361	53 53 50 59 64	77:46 71:47 70:31 66:45 66:08	45 46 47 59 <b>6</b> 2	76*29 73:19 70:81 65:10 72:78	 	  
1891 1892 1893 1894 1895	:	•	79,17,846 81,66,804 83,89,362 85,93,058 87,22,466	4,95,068 6,82,836 7,28,878 9,72,269 8,25,934	1,73,011 2,74,601 2,73,541 4,48,218 3,13,116	2·19 3·36 3·26 5·22 3·59	2,72,065 3,07,651 3,26,770 3,45,323 3,56,596	11,501 2,185 79,310 15,831	99,054 44,551 55,364 + 23,585 59,814	  	  	  	  	56 66 67 87 74	65.03 59.72 62:29 50:25 61:90
1896 1897 1898 1899 1900	:		89,63,620 93,02,715 94,90,476 91,97,485 90,21,432	8,27,500 8,27,371 10,34,088 12,72,160 12,53,861	3,02,071 3,35,776 5,00,200 6,33,355 6,51,957	3*37 3*61 5*27 6*63 6*57	3,48.885 3,61,550 3,64,852 8,65,587 8,73,097	13,415 26,980 66,721 76,332 1,47,611	-60,229 -52,754 +68,627 +1,91,456 +1,31,249	  	  	  	  	75 69 94 114 107	63·32 50·42 51·62 50·21 48·72
1901 1902 1903 1904 1905	:	:	1,01,83,243 1,12,96,019 1,15,01,911 1,17,14,505 1,17,99,857	14,53,829 14,03,266 14,96,120	7,58,124 7,69,568 7,48,689 7,97,671 8,20,992	7:44 6:81 6:51 6:81 6:96	3,91,796 4,23,528 4,53,835 4,48,328 4,50,448	99,195 71,666 52,578 54,487 16,811	+ 2,67,133 + 2,74,374 + 2,42,291 + 2,94,856 + 3,53,733	  			  	123 182 126 138 138	44.76 47.05 46.68 46.68 46.95
1906		•	1,20,09,658	16,55,250	8,36,782	6-97	4,575,88	1,20,110	+ 2,59,054					148	49 45

Based on actual receipts and payments during the year.

# History of railways constructed and in progress.

[For Index scopage 112.]

Number Main head 20 Sub-head (a) to (c). ROHILKUND AND KUMAON RAILWAY SYSTEM—concld.

20 (c) Powayan Light railway (2' 6" gauge)-

The line was constructed originally by the Powayan Steam Tramway Company and the maintenance and working were taken over by the Robilkund and Kumaon Rulway Company from 17th December 1900.

Details of construction -

This line, which connects Shahjahanpur with Mulani, is 39.50 miles long. Its construction was first sanctioned in 1889 and it was opened through in 1894.

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 25 lbs. to the yard, laid on sal sleepers.

Ballast .- The line is ballasted with earth.

Fencing.—The line is unfenced except at stations.

Curres.-There are no curves with a radius of less than 1,000 feet. •

Gradients.—The ruling gradient is 1 in 100.

#### Terms of contracts-

The Powayan Light railway is worked under the following contracts:-

Contracts of—1st July 1901 (between the Seefetary of State and the Powayan Light Railway Company) for maintenance and working.

6th November 1902 (between the Secretary of State and the Rohilkund and Kumaon Railway Company) as to terms of working.

The general conditions of the contracts are as follows .-

Government aid .- Land.

Currency of contract.—The contract is terminable on the 31st December 1912 or at any time thereafter on one year's notice being given by either party.

Terms of working.—The working agency is to retain 70 per cent, of the gross carnings until the line is fully equipped, and thereafter the same percentage as that at which the whole open system is worked, subject to a minimum of 60 per cent. The percentage so retained may include any single item of capital expenditure not exceeding Rs. 200, subject to a maximum charge of Rs. 20 per mile in each half year.

Rates and fares.—The same rates and fares as may from time to time be applicable to the Lucknow-Barcilly railway.

Statistics of working. -

,										TABLE I.				Та	RLE II.
		-	Cu	lenda	r yea	r.				Capital outlay to ead of each year.	Gross carnings,	Net earnings.	Per cent on capital outlay	Earnings per mile per week.	Proportion of expenses to curnings.
1901 1902 1903 1904 1905	:		•	:	·	•	:	:		Rs. 8 11,038 8,03,456 8 94 619 8,91,751 8,94,751	188, 66,862 75,675 71,815 78 015 92,614	Rs. 20,450 22,521 28,482 30,937 36,707	2:09 2:52 3:18 3:16 4:10	RH. 33 37 35 38 45	70°00 70°25 60°34 60°34 60°37
1906				٠	•				•	8,91,751	99,566	39,491	4:11	48	60:34

Number Main header (a) to (f). SOUTH INDIAN RAILWAY SYSTEM—

Chairman .- Sir Herry Kimber, Bart, M. P.

Managing Director .- Henry W. Notman, Esq.

Offices .- 55. Grace Church Street, London, E. C.

Lines comprising the system.—The South Indian railway system is made up of-

				Open line.	Under construction or sanctioned for construction.	Total.
				Miles.	Miles.	Miles.
(a) South Indian railway (3' 3?" gauge)	•			. 1,139.00	13.88	1,143.88
(b) Karaikkal-Poralam railway (3' 3," gauge)				. 14.65	***	14.65
(c) Pondicherry railway (3' 34" gauge)	•			. 7.85	***	7.85
(d) Tanjoro District Board railway (3' 37" gauge)				. 103 83	•••	103:36
(e) Tinnevelly-Quilon (Travancore) (British section) (3' 32" gauge)				. 50.48	40	50.48
(f) Tinnovelly-Quilon (Travancore) (Native state section) (3' 3% gauge)	•	:	•	. 57.98	•••	87-98
		Total		1,364.32	13.88	1,378-20

# History of railways constructed and in progress. [For Index see page112.]

Number Main head 21 Sub-heads (a) to (f). SOUTH INDIAN RAILWAY SYSTEM-contd.

#### 21 (a) South Indian railway proper (3' 33" gauge) -

#### Details of construction-

The total open mileage of the South Indian railway proper is 1,130:00 miles. This may be divided into (1) Madras-Tuticorin section, main line (Madras to Tuticorin), 416:54 miles; branches, 320:18 miles; (2) Fillupuram-Dharmararam section, main line (Villupuram to Dharmavaram), 279 18 miles; Gudur branch, 84 10 miles. First sanction to the construction of (1) was given in 1859 and it was opened through in 1879. (2) was sanctioned in 1888 and opened through in 1892.

In addition to the above there are 13.88 miles under construction.

Permanent-way.—The rails in use are 50-lb. and 52-lb bull-headed steel, 56-lb. and 411-lb. flat-footed steel, 40.3-lb. flat-footed and 68-lb. double-headed iron. The sleepers are east iron pot, steel transverse, Denham Olpherts' cast iron and

Bullast .- The line is ballasted throughout, partly with broken stone and partly with laterite and gravel interspersed.

Fencing .- The line is fenced, with the exception of the Villupuram-Dharmavaram and Pakala-Gudur sections and the Pamban branch which are fenced only at stations.

Curves .- The sharpest curve is of 500 feet radius.

Gradients .- The ruling gradient is 1 in 200, except on the length between Madras Boach and Fort and on the Villupuram-Dharmavaram, Pakala-Gudur, Trichinopoly-Madura, and Karur-Erode sections where it is 1 in 100.

#### Terms of contracts-

The railway is worked under the following contracts:-

Contracts of-24th November 1890 (between the Secretary of State and the South Indian Railway Company) for working.

> 27th June 1901 (between the Secretary of State and the South Indian Railway Company) relating to the Pamban branch.

The general conditions of the contracts are as follows:—

Terms of contract .- The original South Indian Railway Company ceased to exist at the end of 1890, when the railway was purchased by the State. The purchase was effected by means of a cash payment to the Company, and all the

of purchase Premium . 989,277 4,197,557

Company (practically the old one in a modified form) was constituted, with a capital of £1,000,000, as the agency for carrying on the working of the lines after their acquisition by the Government, and for completing a system of State lines which was under construction by the former Company at the date of the termination of its contract. Any further moneys required are provided either by the Secretary of State or raised by the Company under

guarantee Subject to the provision of the contract, all moneys raised by the Company become the absolute property of the Secretary of State.

Currency of contract .- Government may determine the contract on the 31st December 1910 or at the end of any succeeding fifth year, giving 12 months' previous notice. Government may also determine it by giving six months' notice should the Company fail to observe its obligations or the line be worked at a loss for not less than three halfyears continuously. On the expiration of the contract Government are to take possession of the railway and all its appliances, repaying at par to the Company its capital of £1,000,000 and any further capital raised by it and paid to Government.

Power of Company to surrender contract .- Nil.

Terms of working.—After deducting working exponses (which shall include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government) the net receipts shall be applied in payment to Government of the equivalent in rupees of interest at 3 per cent. on £1,000,000, the Company's capital; at 4½ per cent. on £425,000, the irredeemable debenture stock of the old Company; at 3½ per cent. on the debenture stock issued and upon the principal moneys owing in respect of advances made for the Pamhan branch; and 3 per cent. on the net expenditure shown by the capital advance, stores and capital accounts. After deducting the equivalent in rupees of the sums referred to above, the residue, if any, to be divided between Government and the Company in the ratio of the respective capital amounts contributed by each.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 21 Sub-heads (a) to (f). SOUTH INDIAN RAILWAY SYSTEM—contd.

21(a) South Indian railway proper (3' 33" gauge)-concld.

Statistics of working-

	TAR	CER I [INCLUDING (BRITISH	IG THE TINNE	VELLY-QUICE STATE SECT	on (Travanco 1910 of 40 (800)	RE) RAILWAN	r r		T	BLE II HE PON	DICHER	RY	<del></del>
Calendar dar year.	Capital outlay to end of each year.	Gross ournings.	Net carnings.	Per cent. on capital outlay.	Interest.	Company's slure of not carnings	Gain or loss to the State.	Calen- dar year.	Earn- ings per mile per week.	Proportion of expenses to earnings	Culen- dar year.	Earn- ings per mile per week.	Proportion of expenses to carnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.			Rs.	
1879 1880 1881 1882 1863	4,41,96,588 4,46,77,075 4,52,22,730 4,53,69,280 4,53,97,614	33,62,067 35,59,593 37,55,688 87,58,714 38,69,668	10,63,953 9,30,017 12,37,726 14,62,328 13,22,334	2:49 2:08 2:73 3:09 2:09	20,95,206 21,28,643 21,30,568 21,40,871 21,46,579	 	$\begin{array}{c} -10.31,953 \\ -11,98,636 \\ -8,92,842 \\ -7,38,543 \\ -8,24,246 \end{array}$	1861 1862 1863 1864 1865	77 61 71 69 79	47:45 44-43 44:60 57:55 49:53	1897 1588 1889 1890 1891	118 159 167 181 154	68:20 68:98 70:11 57:50
1884 1885 1886 1887 1888	4,67,51,662 4,93,74,900 5,15,40,172 5,40,64,399 5,57,91,978	41,89,049 45,60,126 49,20,176 51,79,324 56,58,683	14,92,191 15,81,714 14,75,914 15,86,729 16,31,692	3:19 3:20 2:86 2:89 2:92	25,40,471 27,02,145 29,80,496 31,25,720 33,80,057	  	10,47,980 11,20,431 15,04,582 15,38,990 17,48,365	1866 1867 1863 1869 1870	106 86 90 84 84	49°28 49°66 1°°64 61°14 62°10	1892 1893 1594 1895 1896	137 149 118 165 165	65:47 63:01 61:25 58:99 56:13 54:89
1889 1890 1801 1892 1893	6,25,01,638 7,27,15,494 7,72,11,805 7,82,83,761 7,63,31,043	59,39,378 64,25,510 70,36,756 77,14,996 80,02,415	17,63,111 26,67,305 23,58,724 27,77,005 30,31,332	2:82 3:66 3:05 3:55 3:98	35,29,935 35,19,564 35,89,776 39,51,093 38,58,152	i, ia,au 	$\begin{array}{l} -17,66,824 \\ -9,95,609 \\ -12,31,012 \\ -14,74,088 \\ -8,23,820 \end{array}$	1871 1872 1873 1974 1875	84 87 120 161 96	55 61 56 87 40 90 60 81 48 16	1897 1593 1599 1590 15901	170 157 159 166 188	53 01 54 50 52 41 50 27 46 17
1894 1895 1896 1897 1898	7,64,13,362 7,68,38,604 7,67,63,325 7,66,46,858 7,45,21,873	80, 16,559 59, 14,947 89, 15,581 91,81,409 84,67,581	32,83,865 38,96,987 40,27,489 42,96,757 38,35,527	4 30 5 07 5 0 5 61 5 15	42,81,812 42,77,575 40,60,677 38,76,142 37,42,523	1,06,449 2,55,71 2,51,567 3,55,70 3,66,173	$\begin{array}{l} -14.04,396 \\ +6.3^{\circ},662 \\ -9.84,755 \\ +95,225 \\ -2.20,467 \end{array}$	1876 1877 1873 1879 1880	90 107 103 105 106	53:27 50:88 66:65 68:48 73:87	1902 1903 1904 1905 1906	189 203 214 221 227	45 60 39 99 44 35 49 51 55 61
1903	7,58,82,623 7,60,70,119 8,23,78,918 • 8,49,97,226 8,69,72,113	84,74,462 89,04,825 1,01,44,657 1,05,98,282 1,23,82,517	39,83,540 45,97,916 54,15,176 57,14,2 4 73,77,614	5 28 5 71 6 57 6 72 8 18	36,39,891 36,77,879 37,23,736 39,64,367 40,28,063	2,15,608 3,68,408 4,59,540 4,80,18a 6,96,450	+ 98,041 + 3,51,629 + 12,31,900 + 12,69,702 + 26,53,126	1881 1882 1583 1884 1885	109 109 112 122 132	67 04 62 69 65 13 64 18 65 12			
1904 1905 1903	10,01,55,636 8,62,95,191 8,91,97,605	1 28,18,085 1,20,34 476 1,32,75,295	71,16,981 65 77.3-0 58,92,976	7 11 7 62 6 62	45 90 992 27,03,867 27,59,511	7.05,4×8 6,52,963 5,66 743	+18 20,501 +32,15,497 +25,66,7.2	1836	113	69:73			

# 21(b) Karaikkal-Peralam railway (5' 33" gauge)--

The line is partly in British, and partly in French, territory and was constructed (by the agency of the South Indian Railway Company) with the object of placing the town and part of Karukkal in communication with the railway system

# Details of construction-

The line is 14:65 miles long. Its construction was sanctioned in 1895 and it was opened in 1898.

Permanent-way.—The permanent-way consists of thi-lb that-footed steel rails had on wooden and steel transverse sleepers.

Ballast.-The line is ballasted with laterite.

Fencing .- The line is fenced only at stations.

Curves .- There are no curves with a radius of less than 1,000 feet.

Gradients .- The ruling gradient is 1 in 200.

## Terms of contract-

The railway is worked under the following contract :-

Contract of -27th March 1902 (between the Government of the French Settlements in India and the South Indian Railway Company) for working.

The general conditions of the contract are as follows:-

Government aid.—The land occupied by the portion in British territory has been made over by the British Government free of cost on condition that the proprietary rights remain vested in the British Government.

Currency of contract.—The contract is terminable by either party giving twelve months' notice to expire on the 30th June or 31st December in any year.

Terms of working.—The line is worked for the same percentage of working expenses to gross earnings as obtains on the undertaking, plus 5 per cent. of the gross receipts of the line for the use of the main line rolling-machinery. If, at any time, the Company can show that the working of the railway involves an actual loss on the percentage term, the Government of the French Settlements in India have to make good the loss.

Rates and fares .- Same as on the South Indian railway.

Based on actual receipts and payments during the year.

# History of railways constructed and in progress.

[For Indem see page 112.]

Main-head 21 Sub-heads (a) to (j) . SOUTH INDIAN RAILWAY SYSTEM—contd.

21(b) Karaikkal-Peralam railway (3' 3%" gauge) -concld.

Statistics of working-

									•			TABLE	I.		TABI	m II.
				Culer	dar j	year.					Capital outlay to end of each year,	Gross earnings,	Net carnings.	Per cent. on capital outlay.	Earnings por mile per week.	Proportion of expenses to carnings.
											Rs.	Rs.	Rs.		Ra.	*
1895 1896 1897 1893 1899	:	:	:	:	:	:	:	:	:		4,759 59,000 5,98 082 7,21,665 7,25,344	 19,703 27,685	7,855 9,037	  1 09 1 25	   27 87	60·19 67·36
1900 1901 1902 1903 1904	:	:	:	:	:	:	:	:	:		7,20,715 7,23,786 7,23,786 7,23,786 7,23,786 7,23,786	24,608 30,450 32,736 38,933 36,945	9,478 13,314 14,619 19,864 29,432	1·30 1·84 2·02 2·74	32 40 43 51 48	61:48 56:28 55:34 48:98 179:66
1905 1906	:	:	:	:		:	:	:	:	:	7,23,786 7,23,786	36,922 39,035	4,406 -4,420	0.61	4S 51	88·07 111·32

## 21(c) Pondicherry railway (3' 33" gauge)-

The line is in French territory and was constructed (by the Pondicherry Railway Company under the supervision of the South Indian railway) with the object of placing the town and port of Pondicherry in communication with the railway system of Southern India and of developing the resources of the French territory.

#### Details of construction-

The line is 7.85 miles long. Its construction was sanctioned in 1878 and it was opened in 1879.

Permanent-way.—The line is laid with 50-lb. bull-headed steel rails on east iron pot sleepers and with 411-lb. flat-footed steel rads on wooden sleepers.

Ballast.—The line is ballasted with stone. Fencing.—The line is fenced.

Curves.—The sharpest curve is of 495 feet radius. Gradients.—The ruling gradient is 1 in 200.

#### Terms of contract-

The railway is worked under the following contract :-

Contract of -30th December 1890 (as renewed, between the South Indian Railway Company and the Pondicherry Railway Company) for working the line.

The general conditions of the contract are as follows:—

Currency of contract.-The contract will be terminable by either party on giving 6 months' notice expiring on the 31st December in any year.

Terms of working. The line is worked for the same percentage of gross receipts as obtains on the undertaking including the Pondicherry railway.

Rates and fures .- Same as on the South Indian railway

															TAI	BLE I.		TABI	LE II.
					Calc	ndar	yoar					4		Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Farnings per nule per week.	Proportion of expenses to earnings.
1879 }		•	•			•			•			•		Rs. Information	Rs. not availabl	Rs.		Rs.	
1890 1891 1892 1893 1894	:	:	:		:	:	:	:	:	:	:	:	•	5,68,543 5,68,543 5,68,543 5,68,543 5,68,543	20,106 15,341 18,014 27,958	 20,107 15,341 18,014 15,425	3·54 2·70 3·17 3·24		
1895 1896 1897 1898 1899	:	:	:	:	:		:	:	:	•	:		•	F 40 F40	50,328 39,681 36,592 31,830 45,305	22,711 17,776 17,169 14,394 21,627	8:99 8:13 3:02 2:53 3:80	≻Included with Indian railway	
1900 1901 1902 1903	:	:		:	:	:	:			:		:		F (10 F 10	59,583 60,174 70,478 73,416 60,119	23,193 32,366 37,960 44,258 33,662	4·08 5·69 6·08 7·78 5·92		
905 1906	:	:		:	:	:	:	:	:	:		•		5,69,543 5,68,518	58,414 55,026	29,827 24,536	5·23 4·32	143 135	48°94 55°41

# History of railways constructed and in progress. [For Index see page 112.]

Number  $\frac{\text{Main head } 21}{\text{Sub-heads } (a) \text{ to } (f)}$ . SOUTH INDIAN RAILWAY SYSTEM--contd.

#### 21(d) Tanjore District Board railway (3' 3\square)-

This railway was constructed by the agency of the South Indian Railway Company, and the money for the railway was raised by the imposition, with the concurrence of the inhabitants or their representatives on the District Board, of a special cess of 3 pies in the rupee on all lands which would be served by the railway or benefited by its construction. It was entirely a now departure, and has opened the way for the provision of railways for which Government are unable to find the money immediately when the District Board has raised sufficient capital from its cess.

#### Details of construction-

The open mileage (Mayavaram to Arantangi), including the quarry branch is 193:36 miles. Construction was first sanctioned in 1890 and the line was opened through in 1903.

Permanent-way.—The line is laid with 414-lb. flat-footed steel and 40.3-lb. flat-footed iron rails on sal, pyinkado, west coast teak and jariah sleepers.

Ballast.—The Mayavaram-Mutupet section is ballasted with laterite and the Mutupet-Arantangi section is being ballasted with laterite over sand.

Fencing .- The line is fenced only at stations.

Curves.—The sharpest curve is of 1.146 feet radius.

Gradients .- The ruling gradient is 1 in 200, except between Adirampatnam and Pattukkottai where it is 1 in 160.

#### Terms of contract-

The railway is worked under the following contract :-

Contract of-22nd July 1897 (between the Secretary of State and the South Indian Railway Company) for working.

The general conditions of the contract are as follows:-

Government aid .- Land was provided free of cost.

Terms of contract.—The funds for the Mayavaram-Mutupet section were in the first instance provided in equal proportions by the Government of Madias from Provincial Revenues and by the Tanjore District Board from its railway guaranteed fund created by a special local cess. On the 1st January 1900 the Tanjore District Board took over the Government section and became sole owners—the purchase money, Rs. 12,34,720, being treated as a loan at 4 per cent. per annum. The extension of the line was carried out by the South Indian Railway Company at the cost of the Tanjore District Board.

Currency of contract.—Contract to remain in force until either party gives 12 months' notice expiring on the 31st December in any year. The Government of India reserve the right of taking over the whole of the railway at any time, on 12 months' notice, by assuming liability for any debentures which the District Board may have issued and by repayment of any further amounts which it may have spent out of its railway guaranteed fund. Under ordinary circumstances this condition will not be enforced up to 31st December 1920 (Government of India No 303 R. C., dated 5th March 1898).

Terms of working.—The line is worked for the same percentage of gross receipts as obtains on the undertaking (which shall include any single item of capital expenditure not exceeding R. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), plus 5 per cent. of the gross receipts of the line for use of rolling-stock.

Rates and fares.—To be agreed upon from time to time between Government and the Company within the maxima and minima in force on the undertaking.

									Тавт	a. I.			Тап	t.m. 11.
	Calendar your.						Capital outlay to end of each year.	Gross earn- ings.	Net carnings.	Per cent. on capital outlay.	Interest.	Gain or lose to the State.	Earnings por milo per week.	Proportion of expenses to earnings.
1890 1891 1892 1898 1894 1895 1896 1897 1898 1899			:				78. 61,509 4,82,149 13,84,433 21,62,937 23,70,123 24,47,158 24,49,850 24,91,853 24,91,905 24,97,355	Rs	Rs        	  2·65 3·63 4·06 4·17 3·11	Rs. 1,230 10,873 37,391 70,917 1,00,701 95,760 97,861 99,159 99,843	Rs1,230 -10,873 -37,331 -70,947 -37,759 -2,031 +1,100 +12,387 -22,216	Rs 103 86 88 95 88	61·50 61·30 50·00 58·10 68·47
1900 1901 1902 1903 1904 1905	:			•			26,50,776 32,17,511 38,14,262 45,70,190 46,32,763 47,33,090 47,98,375	2,32,280 2,90,637 8,08,879 8,90,717 5,24,490 5,86,680 6,01,066	97,782 1,35,765 1,46,764 2,09,167 2,61,364 2,65,302 2,03,883	3 69 4 22 8 84 4 58 5 64 5 61 4 65	99,845 1,02,734 1,35,531 1,63,157 1,97,476 2,25,868 2,21,234 2,34,646	-3,047 -4,952 -3,076 -16,393 +11,691 +35,496 +44,083 -1,813	86 83 103 103 106 101 113 116	50°01 32°02 53°29 52°48 46°47 50°17 54°78 61°26

# History of railways constructed and in progress. [For Index see page 112]

Number Main head 21 Sub-heads (a) to (f). SOUTH INDIAN RAILWAY SYSTEM—concid.

21(e) Tinnevelly-Quilon (Travancore) (British section) (3' 3%" gauge)-

#### Details of construction-

The line is 50.48 miles long. Its construction was sauctioned in 1899 and it was opened in 1903.

Permanent-way.-The line is laid with 50-lb. bull-headed steel rails on east iron pot sleepers.

Ballast.-The line is ballasted throughout with broken stone.

Fencing .- The line is fenced at stations, and at a few places where it runs close to villages and public roads

Curves.—The sharpest curve is of 1,432.5 feet radius.

Gradients .- The ruling gradient is 1 in 100.

#### Terms of contract-

The Travancore branch is worked under the following contract :-

Contract of—27th June 1901 (between the Sccretary of State and the South Indian Railway Company) for working-The general conditions of the contract are as follows:—

Government aid.—Government guarantee interest at  $3\frac{1}{4}$  and  $3\frac{1}{4}$  per cent. on the debentures to be raised by the South Indian Railway Company for the construction of the line.

Currency of contract.—The contract will remain in force until the principal contract for working the undertaking shall terminate.

Terms of working.—The branch is to be worked for the same percentage of working expenses to gross earnings as obtains on the undertaking, subject to maintenance for the first two years after opening being charged to capital. After meeting interest charges, the residue of net earnings to be divided between the Secretary of State and the Company in the proportions in which the residue of net revenue receipts of the undertaking are divisible under the principal contract. If the net earnings are not sufficient to meet interest charges of any half-year, the deficiency attributable to the section of railway within the Native State of Travancore to be borne by the Secretary of State, and that attributable to the section of railway outside the Native State to be borne by the Secretary of State and the Company in the proportions in which the residue of such net revenue receipts would have been divisible between them had there been any such residue.

As between Government and the Native State of Travancore the latter has under-written the guarantee of interest to the extent of the capital required for the construction of the line lying in its State, any excess of net earnings over interest charges attributable thereto being made over to and any deficiency being met by the Native State.

Rates and fares .- Same as on the South Indian railway.

#### Statistics of working-

					TA	BLE I,				_			TAB	LE II.
	END C	OUTLAY TO OF EACH CAE.		Net e	ABNINGS,	UAP	ENT, ON TAL LAY.	INTEREST	Charges.	Gł.	IN OR LOS	1	(Inci. The N	DING
.			GROSE		1				<del></del>	British	aretion.		SECTI	(OM.)
Calendar year.	British section.	Native State scotion.	KARNINGS.	British section.	Native State section.	British section.	Native State section.	British	Native State section.	South Indian Railway Company.	State.	Nutive State sontion.	Earnings per mile per week.	Proportion of expenses to earnings.
	Ra.	Rs.	Rs.	Rs.	Rs.			Rs	Rs	Rн.	Rs.	Rs.	Ru.	· · · · · ·
1962 1963 1904	Included	with the So	uth Indian	railway	proper .		4					{	81 101 85	44·84 41·18 51·04
1905 1 <b>9</b> 06	43,40,925 43,62,285	1,17,84,077 1,18,26,747	4,86,757 4,97 648	68,314 61,824	1,80,963 1,60 655	1 57 1 42	1.24 1.36	1,49,273 1,49,700	3,99,750 3,98 #25	13,284 3 939	-67,695 -73,937	-2,18,787 -2.34,270	86 88	48·78 55·29

# 21(f) Tinnevelly-Quilon (Travancore) Native State section (3' 3%" gauge)-

# Details of construction-

The Native State section is 57.98 miles long. Its construction was sanctioned in 1899 and it was opened through in 1904.

Permanent-way.—The line is laid with 50-lb. bull-headed steel rails on east iron pot sleepers, except for a length of 24.56 miles, between Ponalur and Shencottah, where there are wooden sleepers of jarrah, irul and teak.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is fenced only at stations and at a few places where it runs close to villages and public roads.

Curves.—The sharpest curve is of 477 feet radius.

Gradients.—The ruling gradient between Quilon and Ponalur is 1 in 100 and between Ponalur and Shencottah 1 in 50.

The line is worked on the same terms as apply to the Tinnevelly-Quilon (Travancore) British section [21 (c)]. Statistics of working—

See ander British section [21 (e)]

## History of railways constructed and in progress.

[For Index see page 112.]

Number Sub-heads (a) to (m)

# SOUTHERN MAHRATTA RAILWAY SYSTEM-

Chairman.—Colonel Sir William S. S. Bisset, R.E., K.C.I.E.

Secretary .- E. Z. Thornton, Esq.

Offices.-46, Queen Anne's Gate, S. W.

Lines comprising the system.—The Southern Mahratta	rail	way	r <b>sy</b> s	stem	is 1	nad	e u	p of Open	Under construc- tion or sanctioned for construction.	Total.
								Milos.	Miles.	Miles.
(a) Southorn Mahratta railway (3'3]" gauge)								1,042.04	•••	1,042.04
(b) Bellary-Rayadrag railway (3' 3' gauge)								33.35		33.35
(c) Birur-Shimoga railway (3' 31" gaugo).					. •	•		37.92		37.92
(d) Guntakal Mysore frontier 'railway (3' 3]" gauge)								119.50	•••	119-50
(e) Hindupur (Yesvantpur-Mysore frontier) railway (	3′ 34′	gau	ge)					51:35	•••	51.35
(f) Ho-pet-Kottur railway (3' 34" gauge) .			•					48.03		48.03
(g) Kolhapur railway (Y 34" gauge)								29.27	•••	29 27
(h) Mysore-Nanjungud railway (3' 34' gaug ·)✓								15.30		15.80
(i) Mysore section (Southern Mahratta) (3' 34" gauge)								296-22	•••	296-22
(j) West of India Portuguese railway (3' 3\" gange)						-		51.10		51.10
(1) 7) 1 20 11 1		Ī	· ·	Ō	•	•	·	0. 10	49·47	49.47
(l) Kurnool Road-Kurnool rashway (3' 34" yange)		•	•	•	•	•	•	•	32 00	
(m) Sangli railway (3' 3\" gauge)	•	٠	•	•	•	•	•	•••		32.00
, , , , , , , , , , , , , , , , , , ,		•	•	•	•	•	•		5.77	5.77
				T	tal			1,724.53	87:24	1.811.82

#### Bunning powers-

Home line over foreign line -

# 22(a) Southern Mahratta railway proper (3' 3\frac{3}{4}" gauge)-

#### Details of construction-

The open mileage of the Southern Mahratta Railway proper is 1,012:04 miles. This may be divided into (1) main line (Portuguese frontier to Tadepalli) 500:97 miles, and (2) branches, 532:07 miles. Construction was first sanctioned in 1879 and the main line was opened through in 1890.

Permanent-way.—The rails in use are of 111-lb., 50-lb. and 62-lb flat-footed steel. The sleepers are teak, jamba and steel trough.

Ballast.—The line is ballasted throughout the main line and Poona branch with stone, gravel and sand; the Haribar branch with stone, and the Bijapur branch with stone and gravel.

Fencing.—The line is only partially fenced.

Curres.—The sharpest curve on the main line is of 603 feet radius. The sharpest curve on the Poona branch is of 600 feet radius.

Gradients.—The ruling gradient is 1 in 100, except on the Ghats, between miles 0 and 3 on the main line, where the gradient is 1 in 40.

#### Terms of contracts-

The Southern Mahratta railway is worked under the following contracts:--

Contract of -1st June 1882. - Southern Mahratta Railway Company's principal contract.

28th October 1885.—Contract supplemental to that of 1882, for construction and working of the West Deccan railway.

31st August 1887.—Contract supplemental to those of 1882 and 1885, for construction and working of a line from Rambennur to Harihar and a line from Bellary to Guntakal.

27th February 1889.—Contract supplemental to those of 1882, 1885 and 1887, for completion and working of the Bellary-Kistna railway.

The general conditions of the contracts are as follows:-

Government aid.—Interest in sterling on share capital at 31 per cent, is guaranteed, and an additional 1 per cent, until 31st December 1890.

Terms of contract.—The contract provides that the Company raise £5,000,000, and that any further moneys required shall be supplied by the Secretary of State.

Currency of contract.—The contract is current for a period of 50 years. Government may however determine the contract after 25, 35 or 45 years (i.e., on 30th June 1907, 30th June 1917, or 30th June 1927), on one year's previous notice; or on six months' notice given at any time if the Company fails to observe its obligations, or the line is worked at a loss for three consecutive half-years. Upon determination of the contract by efflux of time or by notice Government have to repay to the Company the amount of the par value of the share capital paid to Government.

Note.—On the 21st June 1906 the Secretary of State for India gave notice of his intention to determine on the 30th June 1907, the contract of the 1st June 1882 and all contracts supplemental thereto. But he has since permitted the Company to continue the working as at present up to 30th June 1908.

Power of Company to surrender contracts.—The Company may determine the contracts on the 89th June in any wear by giving one year's previous notice.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 22 Sub-heads (a) to (m)

SOUTHERN MAHRATTA RAILWAY SYSTEM-contd.

22(a) Southern Mahratta railway proper (3' 3 8" gauge) -concld.

Terms of contracts-concld.

Terms of working.—Up to the 31st December 1890 after deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor work,' subject to a maximum charge on such account of Rs. 23,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision), the net receipts belonged to Government, unless one-fourth part of the same exceeded the extra guarantee of 1 per cent., in which case the amount of the excess was payable to the Company. After 31st December 1890 three-fourths of the net receipts are paid to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government. Statistics of working—

							TABLE I	•				TAB	un II.
Ca	lend	dar 3	oar.		Capital outlay to end of each year.	Gross . carnings.	Net carnings.	Per cent. on capital outlay.	Interest.	Company's share of net carnings.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
1884 1885	:	:	:		Rs. 2,77,07,721 3,63,00,076	Rs. 2,13,059 8,66,226	Rs. —18,131 1,40,238	0.38	Rs. 14,77,196 19,81,340	Re. 	Rн. —14,95,327 —18,41,102	Rs. 50 63	108·51 83·80
1888 1889	:	:	:		6,15,07,620 7,87,73,165 8,68,81,288 9,18,52,138 9,82,85,016	16,34,918 80,32,417 85,38,616 40,31,604 44,71,095	4,88,302 10,03,624 8,85,193 9,61,618 9,14,664	0.79 1.27 1.01 1.04 0.98	26,43,220 34,64,086 31,89,505 32,91,520 31,39,444	41,700 30,036	-21,54,928 -24,60,462 -23,04,012 -23,71,602 -22,54,816	92 87 86 88 85	69:83 66:01 75:70 76:15 78:19
1891 1892 1893 1894 1895	:	:	:		9,42,66,041 9,61,10,671 9,45,71,662 9,51,44,496 9,56,02,591	47,60,567 44,33,107 57,29,918 59,50,542 64,68,011	16,29,919 13,47,999 23,16,567 20,18,567 25,88,948	1·72 1·10 2·45 2·12 2·71	35,59,851 37,85,511 85,42,479 45,87,598 46,80,290	2,58,845 3,43,266 5,84,949 5,57,556 5,22,407	-22,18,777 -21,80,778 -17,60,861 -31,26,587 -26,13,740	89 82 106 108 119	65.76 68.69 59.60 65.44 59.65
1898	:	:	:	:	9,60,94,788 9,67,12,838 9,74,67,550 9,78,60,560 9,82,62,274	67,12,230 64,92,310 50,61,871 58,70,616 64,66,526	29,11,95 <b>9</b> 27,82,625 15,02,414 18,95,002 22,83,366	\$.03 2.88 1.54 1.94 2.32	44,45,740 42,62,886 41,10,275 40,10,557 40,02,119	7,29,698 6,97,133 5,41,277 3,85,332 5,81,807	-22,57,479 -21,77,894 -31,52,138 -25,00,887 -23,00,560	124 119 93 108 119	56:59 56:96 70:82 67:72 64:69
	:	:	:	:	9,84,64,118 9,85,13,781 9,88,51,177 9,91,38,895 10,13,29,322	58,29,471 64,50,686 66,72,302 73,48,458 76,67,700	17,31,134 28,09,908 25,50,721 26,97,722 30,16,473	1.75 2.34 2.58 2.72 2.98	40,42,851 40,79,645 40,94,983 41,08,930 41,37,632	4,92,729 5,03,168 6,01,133 7,20,960 6,20,761	-28,04,445 -29,72,905 -21,15,393 -21,32,168 -17,41,923	107 119 123 135 141	70:36 64:24 61:77 63:29 80:66
1900					10,16,98,345	F2,F2 91 <b>4</b>	33,10,570	3.26	42,08,005	8,76,167	-17,73,602	152	00:03

# 22(b) Bellary-Rayadrug railway (3' 3%" gauge)-

The construction of the Bellary-Rayadrug railway by the agency of the Southern Mahratta Railway Company was sanctioned with the object of increasing facilities for distributing food to the population in the Madras Presidency and of lessening the difficulties and troubles incidental to the periods of scarcity.

#### Details of construction-

The line is 33.35 miles long. It was sanctioned in 1902 and opened in 1905.

Permanent-way.—The permanent-way consists chiefly of flat-footed steel rails, weighing between 411 and 39 lbs. per yard, laid on teak, jamba and Australian eucalyptus sleepers.

Ballast .- The ballast consists of broken stone, sand and moorum.

Fencing .- The line is unfenced.

Curves .- The sharpest curve is of 573 feet radius.

Gradients. - The ruling gradient is 1 in 60.

#### Terms of contract-

The line is worked under an agreement (between the Secretary of State and the Southern Mahratta Railway Company) sanctioned under Government of India, Public Works Department (Railways) No. 1144 R.T., dated the 26th December 1904.

The general conditions of the agreement are as follows :--

Government aid .- The line is the property of Government.

Currency of agreement.—The agreement is terminable at the close of any calendar half-year on twelve months' notice being given by either party.

Terms of working.—Actual cost with a lump sum charge of 11½ annas per train-mile for locomotive and carriage and wagon expenses and for traffic expenses connected with subordinate superintendence, train staff, lighting and general stores, clothing, printing, stationery and tickets.

Rates and fares .- To be fixed from time to time by the Company with the approval of Government.

<sup>\*</sup> Based on actual receipts and payments during the year.

# History of railways constructed and in progress. [For Index see Page 112.]

Number Main head 22 Sub-heads (a) to (m). SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

22(b) Bellary-Rayadrug railway (3' 31" gauge) -concld.

Itatistics of working-

												Тл	LE I.			TAI	BLE II.
	Calendar year.									Capital outlay to end of each year.	Gross	Net carnings.	Percentage of net earnings on capital outlay.	Interest.	Gain or loss to the State.		Proportion of expenses to earnings.
1905 1906	:	:	:	:	•	:	•	:	:	Rs. 7,70,179 7,78,472	Rs. 17,010 37,9:8	Rs. 2,864 2,585	0:33	Rs. 14,102 26,771	Rs. —16,966 —24,236	Rs. 19 22	116·81 93·32

## 22 (c) Birur-Shimoga railway (3' 33" gauge)-

#### Details of construction -

The line is 37.92 miles long. Its construction was sanctioned in 1896 and it was opened in 1899.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails on Mysore teak sleepers. The Bhadra bridge is laid with 50-lb. flat-footed steel rails.

Balldst .- The line is ballasted throughout with stone and sand.

Fencing.—The line is unfonced except for a very short length.

Curves.—The sharpest curve is of 1,500 feet radius.

Gradients.-The ruling gradient is 1 in 89.

#### Terms of contract-

The Hindupur and Birur-Shimoga railways are worked under the following contract :-

Contract of -2nd December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows:-

Government aid .- The lines are the property of the Mysore State.

Currency of contract.—Either party may determine the contract, on giving twelve months' notice, on the 31st December 1904, or on the 1st January or 1st July in any year thereafter. If not determined sooner, the agreement terminates, without prior notice, on the date the Mysorc contract of the 31st August 1887 terminates. On the determination of the contract the Mysorc Government resume possession of the railway and take over the liabilities incurred by the Company on behalf of the railway, and the working stores belonging to the railway, at a valuation.

Terms of working.—The working expenses of the system, excluding expenditure on New Minor Works, are divided between these railways and the others comprising the system in proportion to their gross carnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a Minor Work, subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pays the residue to the Mysere Durbar.

Rates and fares .- To be fixed from time to time by the Company with the approval of Government.

#### Statistics of working -

											TAUL	e I.		TABL	e II.
			(	Zalen	dar y	ear.				Capital outlay to end of each year.	Gross carnings.	Not carnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1896 1897 1898 1899 1900	 : :	:	•	:	:	:	:	:	:	Rs. 2,90,226 6,27,263 15,70,079 20,85,475 22,94,457	Rs 6.186 66,227	Rq 1,881 21,219	   0:09 1:06	Rs.    37	  69·59 63·43
901 902 908 904 905	:	•	:	:	:	:	:	:	: : :	24,01,838 24,05,667 24,07,802 24,06,391 23,98,543	62,058 64,006 61,520 68,224 80,672	16,993 28,867 24,206 24,624 31,102	0.71 0.97 1 01 1.02 1.30	81 38 31 35 41	72:62 63:83 <b>60:65</b> <b>63:9</b> 0 61:44
906			-			,	٠.			23,94,973	1,11,176	14,989	1.88	56	59-5

#### 22(d) Guntakul-Mysore frontier railway (3' 32" gauge) -

#### Details of construction-

The line is 119.50 miles long. Its construction was sanctioned in 1889 and it was opened in 1893.

Permanent-way.—The permanent-way consists of 411-lb. flat-flooted steel rails on steel trough sleepers.

Ballast .- The line is ballasted throughout with stone.

Foreing .- The line is partially fenced.

Curres .- The sharpest curve has a radius of 600 feet.

Gradients -The ruling gradient is 1 in 100.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Sub-hoads (a) to (m). SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

22(d) Guntakul-Mysore frontier railway (3' 33" gauge)—concld.

#### Terms of contract-

The Guntakul-Mysore frontier railway is worked under the following contract:-

Contract of -21st August 1898 (between the Secretary of State and the Southern Mahratta Railway Company) for construction and working.

The general conditions of the contract are as follows:-

Government aid .- The line is the property of Government.

Currency of contract .- The same as in the case of the Southern Mahratta railway.

Power of Company to surrender contract .- The same as in the case of the Southern Mahratta railway.

Terms of working.—The working expenses of the entire system of railways worked by the Company (including this railway), exclusive of Government supervision charges of the Southern Mahratta railway and the Mysore section, are divided between this railway and the other railways worked in proportion to their gross receipts. This railway's share of the working expenses is retained from its gross receipts. The residue is paid to Government.

Rates and fares. To be fixed from time to time by the Company with the approval of Government.

# Statistics of working-

												Тав	LE I.			TABL	E II.
			Cal	onda	и уев	r.				Capital outlay to end of each year.	Gross carnings.	Net eardings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
1893 1894 1895	•	:	:	:	:	:	. :	:	:	Rs. 58,39,806 58,58,414 58,71,739	Rs. 1,97,874 3,68,951 4,39,329	Rs. 78,955 1,27,874 1,81,657	1:35 2:18 3:09	Rs. 4,67,933 2,34,529 2,84,639	Rs. -3,88,978 -1,66,655 -52,982	Rs. 38 59 71	60·00 65·34 58·65
1896 1897 1898 1899 1900	:	: : : : : : : : : : : : : : : : : : : :	:	· · ·	:	:	:	:	:	59,00,158 59,02,198 58,98,666 58,98,608 50,00,016	4,80,992 6,38,278 4,25,702 3,84,829 4,36,116	2,10,690 2,75,983 1,32,471 1,28,459 1,57,837	3:57 4:68 2:25 2:18 2:68	2,35,666 2,36,000 2,36,026 2,35,996 2,35,960	24,926 + 89,983 1,03,555 1,07,537 78,123	77 103 69 62 70	56·20 56·76 68·88 66·62 63·81
1901 1902 1903 1904 1905		:	:	:	:	:	:	:	:	59,02,583 59,04,714 59,07,192 59,14,170 59,21,993	4,47,313 4,73,972 4,96,481 7,54,378 8,07,874	1,36,659 1,74,320 1,97,075 2,73,879 3,34,829	2:32 2:95 3:34 4:63 5:65	2,86,115 2,86,107 2,86,227 2,36,372 2,36,752	-99.456 61,787 89.152 +87.507 +93,077	73 76 80 191 130	69-45 63-22 60-31 63-69 53-55
1906			•			•				59,24,987	8,81,386	3,61,350	6 10	2,36,895	+1,21,455	142	59.00

# 22(c) Hindupur (Yesvantpur-Mysore frontier) railway (3' 3\frac{3}{3}" gauge)—Details of construction—

The line is 51:35 miles long. Its construction was sanctioned in 1890 and it was opened in 1893.

Permanent-way.—The rails on the ghat section are 50-lb. flat-footed steel, State railway type, and 414-lb. flat-footed steel on the remainder of the line. The sleepers are Mysore teak throughout.

Ballast.—The line is ballasted throughout with stone.

Fencing .- The line is fenced throughout.

Curves.—The sharpest curve has a radius of 660 feet.

Gyadients.—The ruling gradient is 1 in 100 with a 1 in 89 gradient on the ghat section.

Terms of contract.—See under Birur-Shimoga railway, 22 (c).

														TABLE	ε I.		ТАН	te II.
				Ce	lend	ar ye	ar.	•					Capital outlay to end of each year.	Gross earnings.	Net carnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1892													Re.	Rs	Rs.		Rs.	
1893	•	•	•	•	•	•	•	•	•	•	•	•	24,41,741		****	000		
1891	•	•	•	•	•	•	•	•	•	•	•	•	24,46,186	57,685	22,708	0 93	39	60.60
1995	•	•	•	•	•	•	•	•	•	•	•	•	21,31,999	1,61,704	56.504	2.32	61	65.0G
1 200	•	•	•	•	•	•	•	•	•	•	•	•	24,19,698	1,92,159	79,886	3.30	72	58.43
1896									_				23,94,762	2,23,900	99,592	4.16	84	*****
1897												Ī	24.79,210	2,69,527	1,18,358	4.77	101	55.50
1898		·	-										24,98,316	1,80,081	56,430	2 26	67	56:09
1899					-				-	- :	·	•	24,98,162	1,49,363	50,528	2.02	56	68:66
1900		:	•	•	-	•	•	•	•	•	•		24,98,047	1,88,183	67,135	2.69	70	66:17
	•	•	•		•	•	•	•	•	•	•	•	49,50,091	1,00,100	07,133	209	70	61.32
1901					٠.						_		24,91,729	1 97 798	60,724	2.13	71	* 69-30
1902								-		- :	·	·	24,97,811	1,97,798 2,13,486	77,908	3 12	80	
1903						-					•	:	24,97,206	2,42,695	96,159	3.85	91	63.51
1904	-		-	-	•	•	Ī	•	•	•	•	•	24,81,812	3,67,923	1,33,715	5.37	138	60'38
1905		:	·		•	•	•	•	•	•	•	•	24,88,944			622	140	63.66
	•	•	•	•	•	•	•	•	•	•	•	•	23,00,1733	8,73,993	1,54,872	622	190	59.59
1906		٠		٠	٠		•		٠	٠	•		25,00,014	4,03,396	1,63,783	6.22	151	59:49

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $ext{Main head 22}_{ ext{Sub-heads }(a) \text{ to }(n)}$ . SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

### 22(f) Hospet-Kottur railway (3' 33" gauge)—

The same remarks apply to this railway as are made against the Bellary-Rayadrug sailway, 22 (6). Details of construction-

The line is 48 03 miles long. Its construction was sanctioned in 1902 and it was opened in 1905.

Permanent-way.—The permanent-way consists of 414 lb. flat-footed steel rails on pine, jamba and teak sleepers.

Ballast .- The line is being ballasted with gravel, stone and sand.

Fencing.—The line is unfenced.

Curves .- The sharpest curve is of 575 feet radius.

Gradients .- The ruling gradient is 1 in 60.

#### Terms of contract-

The same as apply to the Bellary-Rayadrug railway, 22 (b).

#### Statistics of working -

									TARLE	I.		4	TARL	R II.
	•	Ca	lenda	r yea	r.		Capital outlay to oud of each year.	Gross carnings.	Net earnings.	Percentage on car it doubley.	Interes <b>t</b> .	Gam or loss to the State.	Farnings per mile per week.	Proportion of expenses to carnings.
1905 1906				•			R4 13.81,630 14.65,616	12 : 20,230 51 802	Rs. -6.975 2 508	0.17	R4. 44,242 52,132	Rs. 55,217 19,934	Rн 17 23	123186 2517

# 22(g) Kolhapur railway (3' 33" gauge)-

#### Details of construction --

The line is 29:27 miles long. Its construction was sanctioned in 1888 and it was opened in 1891.

Permanent-way.—The permanent-way consists of 411-lb, tlat-footed steel rails on steel trough sleepers.

Ballast.-The line is ballasted throughout with gravel and sand.

Fencing.—The line is unfonced except for a very short length.

Curves .- There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100.

#### Terms of contract-

The Kolhapur railway is worked under the following contract:-

Contract of -17th July 1891 (between the Kolhapur Durbar and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows:-

Government aid .- The line is the property of the Kolhapur State.

Currency of contract .- The contract may be terminated, by either party on six months' notice.

Terms of working.—The working expenses of the system, excluding Government supervision charges and New Minor Works, are divided between this railway and the others comprising the system in proportion to their gross earnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pays the residue to the Kolhapur Durbar.

Rates and faces .- The same as in force on the Southern Mahratta railway.

												1		Таві	.e 1.		Т∡в	LE II.
				Co	lond	ır ye	ar.						Capital ontlay to cited of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay	Earnings per mile per week.	Proportion of expenses to earnings.
					-	-						- !	R4. 13,59,602	Rs.	Rs,		Rs.	
1889 1890	:	:	:	:	:	:	:	:	:	.:	:		21,37,699		•••	•••	<b>.</b>	
1891 1892	:	:	•	:	:	:	:	:	:	:	:	:	23,16,183 28,81,946	58,381 90,793	20,866 29,182	0.90 1.23	60 55	64·26 67·72
1898 1894 1895	:	:	:	:	:	:	:		•	:	:		23,21,687 23,05,317 23,60,206	1,88,096 1,23,390 1,21,147	49,991 43, 32 51,006	2·15 1·89 2·15	78 82 80	57·67 64·64 57·90
1896 1897	:	:	:	:	:	:	:	:	:	:	:		23,05,912 28,21,837	1,21,655 94,630	54,305 41,981	2·85 1·80	80 63	55:36 55:04
1898 1899 1900	:	:	:	:	:	:	:	:	:	:	:		23,24,807 23,24,807 23,24,807	78,271 99,195 1,24,215	21,201 33,986 41,875	1.04 1.46 1.93	53 66 82	69:08 65:74 68:87
1901 1902	• :		•	•	:	•	:		:	:		:	23,24,807	1,14,114 1,28,918 1,21,957	35,750 46,407	1:54 2:00	75 81	68-67 62-55
1903 1904 1905	:	:	:	:	:	:	:		•		:		23,25,587 23,26,188 23,24 251 23,26,251	1,21,957 1,41.676 1,70,404	48,053 53,228 <b>69,43</b> 3	2·07 2·29 2·98	80 93 112	60.60 62.43 59.25
1906	•	•	•	•			•		•	•	•		28,26,251	1,76,234	71,811	8.09	116	59 25

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 22 Sub-heads (a) to (m). SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

#### 22(h) Mysore-Nanjangud railway (3' 3%" gauge)-

#### Details of construction-

The line is 15.80 miles long. It was opened in 1891.

Permanent-way.—The permanent-way consists of 411-lb. flat-footal steel rails, mostly on Mysore teak with a mixture of jamba sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing .- The line is partially fenced.

Curves .- The sharpest curve has a radius of 700 feet.

Gradients .- The ruling gradient is 1 in 100.

#### Terms of contract-

The Mysore-Nanjangud railway is worked under the following contract:-

Contract of -14th December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for working.

The general conditions of the contract are as follows:-

Government aid .- The line is the property of the Mysore State.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. If not terminated sooner, this agreement terminates on the date on which the Mysone contract of the 31st August 1857 terminates. On determination the Company makes over the Mysone Government the tailway and works and pays to that Government all moneys on account of the tailway, the Government indemnifying the Company against all debts and liabilities incurred on account of the railway then subsisting. If mutually agreed upon, the working stores, to be taken over by the Mysone Government at a valuation.

Terms of working.—After deduction of expenditure on New Minor Works, which is debited to each railway 'direct from the total working expenses of the Company's railway system, the balance is divided between this railway and the other railways comprised in the Company's system in the proportion which the gross receipts of this railway bear to the gross receipts of such other railways, and the sum so ascertanced, together with any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000, but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each balf-year, representing the working expenses of this railway, is retained by the Company, and the residue paid to the Mysore Government.

Rates and fares .- To be fixed by the Company with the approval of Government.

#### Statistics of working-

														Танде 1			TAn	LE II.
•					Cale	udar	year.						Capital outlay to end of each year.	Gross ournings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Propertion of exponses to carmings.
1893													Ra. 5,92,414	Rs. 16,478	Rs. 6,1/3	1:03	Rs. 21	
1893	•	•		:	Ċ	÷		•	Ċ	Ţ	•		6,15,551	33,812	14,001	2 26	43	62:60 55:59
1894	•	•	Ċ	•									<b>6,</b> 02,095	37,448	12,866	2 13	47	65.65
1895		•				•			•	•		•	6,00,312	39,100	16,133	5.60	49	57 98
1896													6,09,631	r <b>9,</b> 322	17,125	2.81	50	56.45
1897												•	6,31,764	83,197	14,265	2.25	42	57 41
1898									•	•	•	•	6,40,921	31,193	10,124	1.57	40	67.85
1699					•		•		•	•	•	•	6,46,051	16,610	5,671	0.58	21 38	66-26
1900		•	•	٠	•	٠	•		٠	•	٠	•	6,53,741	30,860	11,357	1.74	38	63 20
1901		_											6,56,162	28,302	7,863	1.20	35	72.22
1902	i.												6,56,162	29,870	10,938	1.67	36	63:28
1903	•.	٠							•				6,56.162	31,923	12 087	1.93	36 39	€0 26
1904											•	•	6,55 462	34,873	14,404	2.19	47	62 95
1905	•	•	•	•	•	•	•	•	•	•	•	٠	6,56,462	44,174	18,015	2.74	54	59 22
1906								•					6,56,462	19,916	20.559	3-13	61	58.81

# 22(i) Mysore Section (Southern Mahratta) (3' 33" gauge)-

#### Details of construction-

The line, which connects Mysore with Harihar, is 296.22 miles long. First sanction to its construction was given in 1877 and it was opened through in 1839.

Permanent-way.—The permanent-way consists of 411-lb. flat footed steel rails, with the exception of about 25 miles which are laid with iron rails. The rails are laid on Mysore teak sleepers with a small proportion of jamba and steel trough sleepers.

Ballast.-The line is ballasted throughout with stone and sand.

Fencing.—The line is only partially fenced.

Curves .- The sharpest curve has a radius of 660 feet.

Gradients.—The ruling gradient is 1 in 100 between Harihar and Bangalore, and 1 in 70 between Bangalore and Mysore.

#### Terms of contract-

The Mysore section is worked under the following contract:-

Contract of -31st August 1887 (between the Scoretary of State and the Southern Mahratta Railway Company) for construction, maintenance and working.

History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head } 22}{\text{Sub-heads } (a) \text{ to } (m)}$ . SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

22(i) Mysore Section (Southern Mahratta) (3' 33" gauge) -concld.

Terms of contract-concld.

The general conditions of the contract are as follows :-

Government aid.—Guarantee of interest in sterling at 4 per cent. on £1,200,000 debenture stock.

Terms of contract.—To meet the cost of constructing the Gubbi-Harihar extension, the Company raised £1,224,000, by the issue of debenture stock for the nominal amount of £1,200,000. The stock is redeemable on or after the 1st March 1936. The contract provides that the Company may raise £1,224,000, and that any further moneys required be supplied by the Secretary of State. All moneys what-sever received by or on behalf of the Company in respect of the undertaking are the absolute property of the Secretary of State during the continuance of this contract.

Currency of contract.—Government may determine the contract at any time, on six months' notice, should the Company fail to observe its obligations, or the line be worked at a loss. It is also provided that should the Company's contract for the Southern Mahratta railway system be determined, then This contract will also be determined. On the termination of the contract, the Secretary of State, if so required by the Company, takes over all liabilities in respect of the debenture stock issued by the latter (which is not redeemable until the 1st March 1936).

Power of Company to surrender contract.-Nil.

Terms of working.—After deducting working expenses, (which may include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), the net receipts are divided in the proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

#### Statistics of working-

										TABLE I.				TA	BLE II.
	Ca	lend	ur ye	Дr.			Capital outlay to end of oach year.	Grous ournings.	Net carnings.	Por cont. on espital outlay.	Interest,	Company's share of net carnings. (Based on actual re ceipts and payments during the year.)	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
1879 . 1830 .	:	:		•	:		Rs. 7,98,213 21,37,736	Rs. 	Rå. 		Rs. 23,960 68,908	Ra.	Rs. -23,960 -68,908	R4. 	:::
1881 . 1882 . 1883 . 1684 . 1885 .	:	:	:		:	•	36,56,345 45,95,058 57,69,057 62,61,620 64,59,346	1,31,525 2,88,390 3,02,895 3,61,148 4,33,954	53,753 1,03,495 99,675 1,65,479 2,07,784	1·47 2·25 1·73 2·64 3 20	98,912 1,68,949 2,19,851 2,41,052 2,51,730	  	-45,159 -65,494 -1,19,676 -75,573 -48,946	51 68 67 67 60	59:13 64:11 67:09 54:22 52:12
1886 . 1887 . 1888 . 1889 .	· :	:	:	:	:		71,35,111 91,36,478 1,25,76,692 1,44,24,093 1,47,11,619	4,69,274 1,13,784 5,70,657 8,96,270 11,56,318	1,05,085 1,41,198 12,295 2,22,034 2,61,700	1:18 1:55 0:43 1:54 0:02	5,57,104 6,70,864 6,94,210 7,07,500 6,48,733	47,964 52,831	-1,51,719 -5,29,666 -6,41,915 -5,33,330 -4,39,864	65 71 79 72 77	59·04 71·60 76·28 75·23 77·94
1891 . 1892 . 1893 . 1894 .	•	:	:	:	:	:	1,50,76,285 1,46,36,205 1,46,42,217 1,47,60,293 1,49,22,452	13,24,525 13,99,463 16,83,203 14,45,412 15,78,281	4,43,717 4,47,906 6,74,705 4,76,156 6,:0,769	2:94 3:06 4:61 3:23 4:23	6,54,950 7,29,624 7,70,489 8,38,525 8,70,947	96,004 1,01,305 1,64,670 1,13,566 1,23,096	-3,07,187 -3,83,023 -2,60,404 -5,05,935 -3,63,274	86 89 109 <b>94</b> 103	66-50 67-92 59-92 66-99 59-72
1896 . 1897 . 1898 . 1899 . 1900 .	:	:	:	:	:	:	1,51,08,257 1,51,99,757 1,55,07,319 1,56,75,416 1,58,70,510	15,84,981 18,80,019 18,92,851 10,60,469 13,76,391	6,76,973 7,95,147 4,13,121 2,29,033 4,71,101	4:48 5:23 2:67 2:10 2:97	8,21,588 7,75,768 7,38,461 7,21,117 7,18,200	1,71,768 1,80,992 1,66,986 76,861 1,11,070	-3,16,488 -1,61,553 -4,92,026 -4,68,945 -3,58,069	103 122 90 69 89	57:29 57:54 70:32 68 97 65:77
1901 . 1902 • 1903 • 1904 .	:	:	:	:	:	:	1.60,14 879 1 60,76,009 1,62,34,903 1,62,59,794 1,64,78,981	14,33,240 15,97,046 15,35,270 15,85,324 17,90,901	4,07,791 5,58 082 5,82,298 5,63,667 6,98,051	2:55 3:47 3:59 3:17 4:24	7,22 224 7,21,062 7,20,000 7,20,000 7,20,000	1,07,697 1,16,979 1,46,896 1,52,391 1,37,682	-4,22,150 -2,79,959 -2,84,598 -8,08,724 -1,59,631	93 104 100 103 116	71:55 65:00 62:03 64:44 61 02
1906 .							1.65,59.502	18,48.348	7,19.072	4:34	7,20,000	1,97,286	-1,98,214	120	61.30

## 22(i) West of India Portuguese railway (3' 3\sqrt{gauge}) --

Chairman.—Sir Henry Green, K.C.S.I., C.B. Secretary.—H. Ringler-Thomson, Esq.

Offices .- 4 Coleman Street, London, E.C.

The line was constructed with the object of connecting the British and Portuguese territories and of affording the Southern Mahratta country a harbour on the West Coast. The Southern Mahratta railway took over the working of the line as from the 1st July 1902.

#### Details of construction-

The line runs from the Portuguese frontier to Mormugao, and is 51·10 miles long. Its construction was sanctioned in 1881 and it was opened through in 1888.

Permanent-way.—The permanent-way throughout consists of 62-lb. flat-footed stoel rails on creosoted pine, sal, teak and jamba sleepers.

Ballast.—The line is ballasted throughout with laterite and blue stone.

Fenoing .- The line is partially fenced.

Curves .- The sharpest curve is of 720 feet radius.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 40 on the Ghat section.

# History of railways constructed and in progress. [For Index see page 112.]

Number  $\frac{\text{Main head } 22}{\text{Sub-heads } (a) \text{ to } (m)}$ . SO

SOUTHERN MAHRATTA RAILWAY SYSTEM-contd.

22 (j) West of India Portuguese railway (3' 3\sqrt{gaugg})-concld.

Terms of contracts-

The West of India Portuguese railway is worked under the following contracts:-

Contracts of—18th April 1881, modified by the contract of 19th December 1892 (between the Portuguese Government and the West of India Portuguese Railway Company) for the construction of a harbour at the Port of Mormugae and a railway from Mormugae to the Portuguese Frentier.

21st August 1902, between the Southern Mahratta Railway Company and the West of India Portuguese
Railway Company for the maintenance and working of the railway from Mormugao to
the Portuguese Frontier, and the harbour at the Port of Mormugao.

The general conditions of the contracts are as follows:-

Government (Portuguese) aid.—5 per cent. per annum is guaranteed to the West of India Portuguese Railway Company on £800,000 and 6 per cent. on £550,000.

Currency of contracts.—The contract of 1881 is current for a period of 99 years from date of opening, when the line and all its appurtenances become the property of the Portuguese Government by payment to the Company of the value of rolling-stock, moveable machinery, stores, etc. The Portuguese Government may, however, determine the contract, at any time, on six months' previous notice, by payment in sterling of the actual outlay of the Company on the railway, tolegraph and other works, with 10 per cent. added thereto, together with the then value of rolling-stock, machinery, station appliances and stores. The contract of 1902, between the Southern Mahratta and the West of India Portuguese Railway Companies, which took effect from the 1st July 1902, is to continue in force for five years, subject to amendment or determination after two years on six months' notice by either party.

Power of Company to surrender contract,—By the contract of 1881 as modified by that of 1892 the West of India Portuguese Railway Company may at any time surrender the contract by giving six menths' notice if the Portuguese Government fail to pay in full the interest guaranteed on its capital. On surrender of the contract the Portuguese Government are to pay to the Company in stering an amount equal to the total capital expended on the railway, telegraph, etc., and in addition 10 per cent. of such expenditure; and also purchase the rolling-stock, machinery, etc., at a valuation.

Terms of working by Southern Mahratta Railway Company.—The West of India Portuguese and the Southern Mahratta railways are worked as one concern, and the expenses of the system (exclusive of expenditure on 'New Minor Works' and of interest payable by the Southern Mahratta railway on the capital cost of telegraph lines) are divided in proportion to their gross carnings, the net earnings to be applied—in payment of a contribution sanctioned by the Portuguese Government—towards a reserve fund; in payment of the guaranteed dividends on the capital of the Company; and in payment of the residue to the Portuguese Government and the Company in equal proportions.

The contract of 1902 provides that a separate account be kept of the revenue transactions at the Port of Mormugao, and the amount to be charged for working to be the actual expenses of working and maintenance, plus 10 per cent. thereon for supervision by the Southern Mahratta railway, subject to the provision that the relation of the aggregate expenses of working—including supervision—to the total receipts shall not exceed, without the sanction of the West of India Portuguese Railway Company, the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899; should any such excess occur it is to be annulled or reduced as much as possible by a corresponding diminution in the charge for supervision.

Rates and fares.—Subject to the maxima prescribed in the contract between the Portuguese Government and the West of India Portuguese railway and to the maxima and minima prescribed in the contracts between the Secretary of State and the Southern Mahratta railway, the rates both for through and local working shall be fixed from time to time by the Southern Mahratta railway and shall be applicable to the whole system.

The shipping and port charges to conform with those in force under the Bombay Port Trust, and not to exceed those charges without the mutual consent of the British and Portuguese Governments.

														TA	BLK I.		TAB	LE II.
				Ca	londs	ar y	ear.						Capital outlay (in- oluding outlay on Harbour works) to end of each year.	Gross carnings.	Net earnings.	Per cent, on capital outlay.	Enruings per milo per week.	Proportion of expenses to earnings.
1890													Rs. 1,68,14,170	Rn. 4,75,437	Rs. 67,001	0.41	Re. 138	74-24
1891 1892 1893 1894 1895	:	:	:	:	:	:	:	:	:	:	:	:	1,63,32,139 1,63,00,901 1,62,74,816 1,63,12,813 1,68,31,966	5,41,014 8,74,681 5,86,705 5,48,673 5,83,077	1,21,583 11,107 1,65,069 1,19,332 1,12,186	0.74 0.07 1.01 0.73 0.69	157 109 168 157 166	86:01 106:01 78:18 86:47 90:75
1896 1897 1898 1899 1900	:	:	:	:	:	:	:	:	:	:	:	:	1,63,80,444 1,63,40,168 1,62,97,448 1,62,96,432 1,63,29,262	2,97,176 1,79,722 2,20,870 5,72,475 8,33,596	-78,893 -1,60,785 -1,10,145 1,64,665 -66,845	::: ::: ï·01 :::	90 55 65 157 96	137'34 189'46 173'60 83'15 120'04
1901 1902 1903 1904 1905 1906	:	:	:::::::::::::::::::::::::::::::::::::::	:	:	:	:	:	:	:	:	:::::::::::::::::::::::::::::::::::::::	1,63,42,023 1,63,08,793 1,63,08,793 1,63,07,793 1,63,90,269 1,63,90,269	2,68,120 8,54,657 3,96,235 4,89,786 4,44,519 4,38,965	48,580 51,887 1,51,112 1,83,414 1,77,958 1,73,268	 0°37 1°10 1°33 1°29 1 26	205 183 149 184 167 165	113:20 85:51 61:86 62:55 50:97 60:58

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 22 SOUTHERN MAHRATTA RAILWAY SYSTEM—concld.

22 (k) Bezwada-Masulipatam (3' 3%" gauge)-

This railway will be 49:47 miles long. It was sanctioned in 1905 and is under construction.

22 (1) Kurnool Road-Kurnool (3' 34" gauge)-

The construction of this line has been sanctioned with the object of providing facilities for the distribution of grain to the population of the Madras Presidency, and of lessoning difficulties incidental to the period of scarcity.

The line will be 32 miles long. It was sanctioned in 1906 and is under construction.

22 (m) Sangli (3'33" gauge)—
This railway (Miraj Junction to Sangli town) will be 5.77 miles long. Its construction from funds supplied by the Sangli Durbar was sanctioned in 1905.

Number

Main head 23 · UDAIPUR-CHITOR RAILWAY (3' 3% gauge) -Hub-houd (a)

Bunning powers-

Home line over Foreign line :-

Miles.

Rajputana-Malwa railway, Ber ch Signal Station to Chitorgarh. 1.42 The line is owned by the Udaipar State. It was a riked by the Bombay, Baroda and Central India railway as a

temporary measure up to the 31st December 1897, since which date it has been worked by the Udaipur State. Details of construction-

The line is 67:30 miles long. Its construction was smetioned in 1994 and it was opened through in 1899.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails laid on deedar sleepers.

Ballost.—The ballast consists of broken stone.

Fencing.—The line is fenced round static as only.

Curves.—On the Berach-Deba is a distribute sharpest curve is of 1,116 feet radius; and on the extension from Debari to the Ahr river near Udaipur, at the about the sharpest curve has a radius of 820 feet.

Gradients.—The ruling gradient is 1 in 120, except on the section Debari to Udaipur where it is 1 in 100.

Terms of contract-

The line is owned and worked by the Udaipur State.

Statistics of working-

																	TARL	z I.		Тав	LR II.
						Calo	ndar	year	:							Capital outlay to and of each year.	Gross ournings.	Net carnings.	Per cent. on capital outlay.	Farnings per mile per week.	Proportion of owners to carnings.
		·~· · - ·		*****			- 1,	-								Rs.	Rs.	Rs.		Ba	
1898 1894 1895	:	:	:	:	:	:	:	:	:	;	:	:	:	:	:	7,000 2,70,472 13,39,850	 54,762	 18,778	  1·40	 42	  65·67
189 <b>6</b> 189 <b>7</b> 1898 1893 1900	:	:	:	:	:	:	:	:	:	:	:	:	:	:		15,99,040 17,89,252 19,89,912	1,35,219 1,23,175 1,40,822 2,10,540 3,17,928	59,750 49,881 61,364 1,01,829 1,85,703	3:44 2:69 3:43 5:27 9:38	48 99 46 62 91	60-25 65-15 57-83 50-21 41-56
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	· :	:	:	:	:	•		:	20,65,630 20,66,171 20,66,033	2,22,175 2,17,388 1,77,817 1,51,293 2,07,927	94,112 97,131 66,446 53,175 1,03,552	4·56 4·70 3·21 2·57 5·00	62 51 43	57:63 55:52 62:63 64:86 50:19
1906												,				20,7.,667	2,47,813	1,05,467	6.52	71	45-33

Number Main hoad 24 BARASET-BASIRHAT LIGHT RAILWAY (2' 6" gauge) —

Details of construction-

The line is 26.06 miles long. Its construction was sanctioned in 1905 and it was opened in 1905.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on pyinkado, sal and Australian jarrah wood sleepers.

Ballast .- The line is ballasted with broken brick.

Foncing .- The line is unfenced.

Curves. - The sharpest curve has a radius of 400 feet.

Gradients .- The ruling gradient is 1 in 250.

Terras of contract-

The line is worked on the terms contained in the Bengal Government Notification No. 86 R., dated the 15th May 1903, under the following agreement: Agreement—of 14th December 1807 (between the District Board of the 24-Parganas and the Baraset-Basirhat Light

Railway Company).

The general conditions are as follows: Aid by District Board.—The District Board guarantees such an annual subsidy as will make the not profits equivalent to Rs. 1,500 per annum per mile of line declared open, subject to a maximum of Rs. 38,000, and allows the free use of a width of not more than 8 feet along one side of the District road. (The Company to acquire at its own expense land

necessary for stations and diversions.) Currency of agreement.—Upon the expiration of twenty-one years from the date of the order authorising the construction, by giving six months notice, or at intervals of seven years thereafter, the District Board can exercise the right of purchase on payment of twenty times the average yearly net earnings of the four years preceding, together with a bonus of twenty per cent. thereon.

# History of railways constructed and in progress. [For Index the page 112.]

Number Main head 24. BARASET-BASIRHAT LIGHT RAILWAY (2' 6" gauge)—concle

Terms of contract-ooneld.

Terms of working.—Any surplus profits in excess of 4 per cent. on share capital plus not more than 4 per cent. on debenture capital are equally divided between the District Board and the Company.

Rates and fares.—Certain maxima have been fixed within which the Company may vary its rates.

Statistics of working-

•	•		•	TABLE I.				Таві	s IL
Calendar year.	Capital outlay to end of each year.	Gross curnings.	Not earnings.	Por cent. on capital outlay.	Subsidy from District Board,	Total	Percentago of total in- come on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1905 1906	Rs. 9,06,310 9,47,058	Rs. 1,11,202 1,50,731	Rs. 55,675 79,488	6 07 8 39	-5.394 -12,669	Вн. 50,281 <b>66,8</b> 19	Rs. 5:55 7:08	Rq. 90 111	49-93 47-26

Number Main boad 25 BARSI LIGHT RAILWAY (2' 6" gauge)—

Chairman .- Sir Alexander Wilson. Secretaries - W. A. Browne & Co.

Offices.-Winchester House, Old Broad Street, E. C.

#### Details of construction-

The open mileage of the Barsi Light railway is 78.50 miles. It is made up of the following:—
(1) Main line, Barsi Road Junction to Barsi Town, 21.59 miles;

Tadwale extension, Barsi Town to Tadwale, 26.70 miles; and

(3) Pandharpur extension, Barsi Road Junction to Pandharpur, 30.21 miles.

The main line was sanctioned in 1895 and opened in 1897 and the Tadwale and Pandharpur extensions were sanctioned in 1902 and opened in 1906.

Permanent-way .- The permanent-way consists of 35-lb. flat-footed steel rails on steel sleepers.

Ballust.—The line is ballasted with stone and moorum.

Fencing.—The line is unfenced, except for a short distance on either side of level crossings and at bridges. Barsi Road Junction, Barsi Town, Tadwale and Pandharpur stations are also fenced, Curves.—The sharpest curve—is of 450 feet radius.

Gradients.-The ruling gradient is 1 in 100. There are, however, two stoeper gradients on the main line-one of 1 in 89 and one of 1 in 90; and two on the Tadwale extension-one of 1 in 50 and the other of 1 in 70.

#### Torms of contracts-

The Barsi Light railway is worked under the following contracts:-

Contracts of-1st August 1895 (between the Secretary of State and the Barsi Light Railway Company) for construction, maintenance and working the live from Barsi Road Junction to Barsi town.

26th August 1902 (between the Secretary of State and the Barsi Light Railway Company) for construction and working of the extensions.

4th December 1905, supplemental to that of 26th August 1902.

Despatch-from Secretary of State, No. 51 Railway, dated the 8th July 1904, regarding the grant of extension of the term at the end of which the option of purchase may be exercised.

The general conditions are as follows:-

Government aid .- The Company is allowed the use of part of the road between Barsi Town and Barsi Road Junction

stations. Land is provided free for the extensions.

Currency of contracts.—Government may determine the contracts on the 1st January 1944, or at the expiration of any subsequent period of 10 years, by giving 12 months' notice. If the contract is so determined Government are to pay the Company in England in sterling an amount equal to the total paid up capital, so far as such capital was expended with the authority of the Secretary of State.

Power of Company to surrender contracts .- Nil.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

											TABLE	ĭ.	·	TABL	g II.
				Caler	dar :	year.				Capital outlay to end of each year.	Gross carnings.	Net carnings.	For cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1895	•	•						•		Re. 2,357	Ba,	Rs.	*	Ra.	***
1896 1897 1898 1809	:	:	•	:	:	:	:	:	:	10,06,657 13,43,891 13,42,592 13,56,800 13,50,501	1,07,778 1,30,031 1,56,118 1,21,440	21,560 24,559 61,475 42,440	1.60 1.83 4.75 3.13	115 116 139 111	80.00 81.15 58.63 65.90
90) 902 908 904 905	:	:	:	•	:	:	•	:	:	. 12,99,589 . 13,18,242 . 12,59,175 . 13,18,293 . 28,13,907	1,68,238 1,50,275 1,30,694 1,66,834 2,19,478	79,588 52,879 53,423 <b>64,9</b> 53 1,39,618	6·13 4·02 4·24 4·93 4·96	150 134 116 149 195	52·69 64·81 59·12 61·09 36·39
906			;	:	:					39,41,807	2,19,884	1,09,862	2.78	96	49-90

# History of railways constructed and in progress.

[For Index see page 112.]

# Number Main head 26 BUKHTIARPORE-BEHAR LIGHT RAILWAY (2' 6" gauge)—

The line, which has been laid as far as possible on the District road, is 1850 miles long. Its construction was same-tioned in 1901 and it was opened in 1903.

#### Details of construction-

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on pyinkado sleepers.

Ballast.—The ballast consists of broken stone, except in the first few miles where a portion of the packing has been done with broken brick.

Fencing.—The line is unfenced.

Curves .- The sharpest curve has a radius of 260 feet.

Gradients.—The grades are easy, except at bridge approaches and up through the village of Chero where the grade is 1 in 100.

#### Terms of contract-

The railway has been constructed and is worked on the terms contained in Bengal Government Notification No. 100 R., dated the 25th June 1901, under the following agreement:—

Agreement of --- 21st August 1899 (between the District Board of Patna and the Bukhtiarpore-Behar Light Railway Company).

The general conditions are as fellows :--

Government aid.—In addition to land, which has been provided free of charge except for station sites and diversions from the district road, the District Board supplements the net earnings, subject to a maximum limit of Rs. 32,000 per annum, to allow of the Company paying a dividend of 4 per cent. per annum on the Company's share capital of Rs. 8,00,000.

Currency of agreement.—In the event of the District Board exercising the right of purchase under section 41 of the Bengal Act, 111 of 1883, viz., upon the expiration of twenty-one years from the date of the order of the Local Government, authorising the construction of the line, by giving six months' notice, or at intervals of 7 years thereafter, the value to be calculated at 20 years' purchase of the average net profits to the Company during the four years preceding the transaction together with a bonus of 20 per cent thereon.

Terms of working.—Any surplus profits in exacts of 4 per cent. on share capital, plus not more than 4 per cent. on debenture capital, are equally divided between the District Board and the Company.

Rates and fares .-- Certain maxima have been fixed within which the Company is permitted to vary rates,

#### Statistics of working-

											TAULE I.				Тлв	.E II.
				Caler	ndar	year.					Capital outlay to end of each year.	Gross cornings,	Net carnings.	Per cent. on capital outlay	Earnings per wilo per week,	Proportion of expenses to carnings.
1903 1904 1905 1906	•	•	:	•	:	:	:	:	:	:	Rs. 7.47,838 8,10,059 8,11,098 8,70,262	Rs. 35,800 1,13,590 88,661 1,11,324	Rs. 15,120 65,963 35,140 48,080	2/16 8 11 4 37 5 79	Re 74 181 92 116	57:77 41 90 60 03 56*81

# Number Main head 27 Subshead (a) . CUTCH STATE RAILWAY (2' 6" gauge)—

#### Details of construction-

The mileage of the open line (Tuna to Anjar) is 11.67 miles. Its construction was sanctioned in 1903 and it was opened in 1905.

There are, in addition, 27 38 miles (Anjar to Bhuj) under construction.

Permanent-way. - The permanent-way consists of 30-lb. flat-footed steel rails on half-round jungle teak sleepers.

Ballast .- The line is ballasted with stone.

Fancing .- The line is unfenced.

Curves.—The sharpest curve is of 359 feet radius.

Gradients.—The ruling gradient is 1 in 200.

#### Terms of contract—

Nil. The line is owned and worked by the Cutch State.

										т	ABL	<b>z</b> 1.					TABL	n II.
				c	ulend	lar y	oar.						Capital outlay to end of each year.	Gross carnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per wook.	Proportion of expenses to earnings.
													Rs.	Rs.	Rs.	,	Rs.	
1905			•		•			•			•		4,25,731	22,367	15,864	3.72	59	29.07
1906	•	•	•	•		•	•	•	•	•	•	•	7,18,667	. 40,273	19,919	2.77	68	50-54
													1	1				

# History of railways gonstructed and in progress. [For Index see page 112.]

Number Sub-head (a) DHOLPUR-BARI RAILWAY (2' 6" gauge)-

#### Details of construction-

This line, from Dholpur on the Indian Midland railway to Bari, was sanctioned in 1905 and is under construction by and at the cost of, the Dholpur State. It will be 19:25 miles long.

#### Terms of contract-

Nil. When open, the line will be maintained and worked by the Durbar.

Number Main head 29 DWARA-THERRIA LIGHT RAILWAY (2' 6" gauge)

#### Details of construction-

The line will be 19:50 miles long. Its construction was sanctioned in 1902.

The construction of this line, which was suspended in June 1904 for want of funds, continues at a standstill, the company being unable to raise the funds necessary for its completion.

#### Terms of contract-

The Dwara-Therria Light railway on completion is to be worked under-

Terms. - Contained in the Notification issued by the Chief Commissioner of Assam under letter No. 41, dated the 14th August 1902.

The general conditions are as follows:-

Government aid.—Guarantee of interest at 4 per cent. per annum for 10 years on a debenture loan of 4 lakhs of rupees, required to complete the Dwara-Maolong section. Land to be provided free of cost.

Currency of contract.—The Sceretary of State may, after the Dwara-Maolong section has been opened for twenty-one years and thereafter at intervals of ten years, terminate the contract and take over the railway with all its equipments, buildings and property, upon giving two years' previous notice, on paying twenty-five times the average yearly net earnings of the last three years with a minimum of 100 per cent. of the cost price of the light railway.

Rates and fares .- Certain maxima have been fixed. Full control over charges of all kinds for the use of the railway is reserved by the Local Government.

Number Main hoad 30 sub-head (a). KALKA-SIMLA RAILWAY (2' 6" gauge)—

Chairman .- Colonel Alexander Jorome Filgate, R.E.

Secretary .- C. E. Rutter, Esq.

Offices .- 17, Victoria Street, Westminster, S. W.

The railway was constructed by the Delhi-Umballa-Kalka Railway Company.

On the representations of the Delhi-Umballa-Kalka Railway Company it was decided to purchase the line for £300,000, the Secretary of State waiving all claims of arrears of unpaid interest on the advances made to the company. The purchase of the line by the State was effected from 1st January 1906; but the company continued to work it under the direct orders of the Railway Board up to the 31st December 1908. It was made over to the North Western (State) railway administration with effect from the 1st January 1907.

# Details of construction -

The line is 59:44 miles long. Its construction was sanctioned in 1893 and it was opened in 1903.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails on wooden sleepers.

Ballast.-The line is ballasted with stone.

Fencing .- The line is fenced only along the Kalka camping ground and through the skirts of the town of Kalka.

Curves .- Most of the curves are compound, the limiting radius being 120 feet.

Gradients .- The ruling gradient is 1 in 33.

Terms of contract-Nil. The line is owned by the State.

Rates and fares .- Certain maxima and minima have been fixed, and, subject to certain special conditions regarding charges for tunuels, rates may be varied within the maxima and minima.

												T	BL	e I.				TABI	m II.
					Ca	dend	ar ye	ar.						Capital outlay to end of each year.	Gross carnings.	Net carnings.	Pur cont, on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
899 1 <b>900</b>	:	:	:	•		:	:	:	:	:	:	:	:	Rs. 5,53,228 18,18,465	Кв, 	Rs	•	Rs	
901 903 903 904 905 906	; :	:	:	:	:	`. •	:	:	:	:	:	:	:	34,86,093 92,81,656 1,41,32,684 1,68,25,519 1,76,11,644 1,63,06,486	32,052 5,90,403 7,52,460 7,61,322	7,022 2,08,240 4,00,813 3,07,125	0.04 1.24 2.28 1.88	7 191 243 247	78·09 64·75 40·78

# History of Railways constructed and in progress. [For Index see page 112.]

Number Main head 31. SHAHDARA (DELHI)-SAHARAN PUR LIGHT RAILWAY (2'6" gauge)—

#### Details of construction-

The line will be 125 miles long, viz., (1) main line (Shahdara to Saharanpur) 95 miles and (2) branch (Baraut to Meerut) 30 miles.

Its construction and working by Messrs. Martin and Company of Calcutta was authorized by an order contained in the Notification of the Government of the United Provinces of Agra and Oudh,  $\frac{339}{187}$  R., dated the 18th April 1904, and a company, styled the Shahdara (Delhi)-Saharanpur Light Railway Company, was registered on the 28th November 1905 for the purpose of constructing the line.

Only the main line is under construction.

#### Terms of contract -

The line will be worked under the following agreement :-

Agreement of—11th October 1905 (between the Government of the United Provinces of Agra and Oudh and Messrs. Martin and Company).

The general conditions are as follows:-

Government aid .- Free graut of laud for a single 5' 6" gauge line and for all conveniences and works.

Currency of agreement.—The Sceretary of State will have the right to terminate the contract 21 years after the date of opening or 23 years after the date of the Government letter sanctioning the construction of the tramway, whichever is earlier, at 25 years' purchase of the annual profits to the Company for the preceding 3 years, subject to a minimum of the capital expended and a maximum of 25 per cent. in excess of that sum. This option, if not exercised at the time mentioned, may be exercised at the end of successive periods of 7 years counting from that date. In the event of its being determined to construct a milway on a different gauge in place of the tramway and if the Government and the Company fail to agree that the alteration shall be made by the Company, then the Government will have the right to acquire the tramway at any time on 12 months' notice at 25 per cent. in excess of the Company's capital expenditure.

Terms of working.—Whenever the net profits of the tramway shall be in excess of 4 per cent. upon the paid up capital of the company, such surplus profits shall, after setting aside such reasonable sum as the directors of the company may deem proper to carry forward, be equally divided between the Government and the company.

Rates and fares .- Certain maxima have been fixed.

# Number Main head 32 . TARAKESHWAR-MAGRA LIGHT RAILWAY (2' 6" gauge)—

#### Dotails of construction-

The line is 33.27 miles long, viz.:—from Magra to Tarakeshwar (31.12 miles) and from Magra to Tribeni (2.15 miles). Its construction was sanctioned in 1891 and the two sections were opened in 1895 and 1994, respectively.

Permanent-way.—The permanent-way of the main line consists of 30-lb. flat-footed steel rails laid for 10 miles on steel transverse sleepers and for the remainder on pyinkado sleepers.

Ballast.—Sand and broken brick.

Fencing .-- The line is partially fenced.

Curres .- The sharpest curve is of 716.25 feet radius.

Gradients.—The ruling gradient on the main line is 1 in 1,000; there are short gradients of 1 in 500 to 1 in 700 at bridge approaches; from the bridge under the East Indian railway to Magragunj station, the line is on a gradient of 1 in 350. The ruling gradient on the Tribeni extension is 1 in 500.

#### Torms of contracts-

The Tarakeshwar-Magra Light railway is maintained and worked on the terms contained in Bengal Government Notification No. 1, dated the 4th January 1896, under the following agreements:—

Agreement of-16th October 1890 (between the District Board of Hooghly and the Bengal Provincial Railway Com-

pany).
12th March 1904 (between the Secretary of State for India and the Company).

The general conditions are as follows :--

Government and .-- Free grant of land for the Tribeni extension.

Currency of agreement.—In the event of the District Board wishing to purchase the railway at the end of 21 years under the provisions of section 11 of the Bengal Tramways Act, 1883 (Bengal Code), the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay.

Terms of working.—The line is worked by the owning company.

Rates and fares, - Certain maxima have been fixed within which the Company is permitted to vary its rates.

											T	BLE	I.				TABL	e II.
				c	alond	lar y	oar.					-	Capital outlay to end of each year.	Gross carnings.	Net carnings.	Per cont. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earn-ings.
1898 1899 1900	:	:	:	:	:	:	:	:	:	:	:	:	Rs. 9,44,627 9,62,446 9,61,811	Ra. 74,074 66,168 76,594	Rs. 21,002 12,192 20,961	2·22 1·27 2·18	Rs. 46 41 47	71:65 81:58 72:63
1901 1902 1943 1904 1905 1906	:	:	:	:	:	:	:	:	:	•	:	:	9,72,175 9,76,194 10,15,987 10,44,975 10,46,674 10,78,087	83,150 84,272 85,540 89,735 86,688 1,00,072	19,890 24,842 25,350 27,564 21,679 82,762	2·04 2·54 2·50 2·63 2·07 8·05	51 52 53 59 50 58	70·23 70·82 70·87 69·28 74·81 67·26

# History of railways constructed and in progress. [For Index see page 112.]

# Number Main head 33 Sub-head (a). TEZPORE-BALIPARA LIGHT RAILWAY (2' 6" gauge)—

On the 3rd May 1898, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

A tramway constructed at the expense of the Borjuli Tea Company connects the Borjuli Tea Factory with Rangapara station on the Texpore-Balipara Light railway. The tramway is 2 miles long and is worked by the Texpore-Balipara Light railway. It is used for passenger and goods traffic. Details of construction-

The line is 20:10 miles long. Its construction was sanctioned in 1894 and it was opened in 1895.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on nahor sleepers.

Ballast .- The line is unballasted.

Fencing.—The line is fenced only at stations, Curres.—In the first mile there are two curves with radii of 500 feet.

Gradients .- The ruling gradient between Tezporo and Rangapara is 1 in 125 and between Rangapara and Balipara 1 in 100.

#### Terms of contract-

The Tezpore-Balipara Light railway is maintained and worked under-

Terms-contained in the Notification issued by the Chief Commissioner of Assam under letter No. 33, dated the 1st June 1895.

The general conditions are as follows :-

Government aid .- Free use of Government land and a subsidy to the extent of Rs. 5,000, up to the end of March 1909, from the Local Board at Tezpore.

Currency of contract.—The Secretary of State may, after the railway has been opened for fifteen years and thereafter at intervals of seven years, terminate the contract and take over the railway with all its equipments, buildings and property, upon giving 12 months' previous notice and on paying the Company the value of the property as a dividend earning investment together with an additional bonus of 20 per cent, over and above such value.

Terms of working.—The line is worked by the owning company. Rates and fares.—Certain rates and fares have been lixed.

#### Statistics of working-

					Танг. г Ј	•				TABL	e II.
Cal	endu	ır yen	Capital outlay to end of cach year.	Gross carnings.	Net carnings.	Per cent on capital outlay.	Subsidy from District Board.	Total income.	Per cent, of total ir come on capital outlay.	Earnings per mile per week.	Proportion of expenses to carnings.
1898 1899 1900 1991 1902 1903 1904 1905			 188, 4,50,927 4,74,177 4,87,340 4,87,340 4,87,240 4,87,240 4,87,240 4,87,240 4,87,240	Rs. 55,745 95,157 95,851 83,810 85,012 94,742 58,463 1,03,380 1,14,740	Ra. 20,157 26,156 25,797 16,898 21,651 27,739 17,291 27,052 34,078	4:41 5:52 5:29 5:17 4:13 5:67 3:54 5:55 7:17	Re. 5,000 1,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000	Rs. 25,157 81,156 30,797 21,863 26,651 02,739 22,291 32,682 39,976	5:51 6:57 6:32 4:49 5:47 6:71 4:57 6:18 8:20	Rs. 82 91 92 80 81 91 85 99	76 49 72:51 73:12 79:84 74:53 70:73 80:43 78:80 69:51

#### Number Main head 34 Sub-head (a) THATON-DUYINZAIK LIGHT RAILWAY (2' 6" gauge)—

The line is 7.76 miles long. Its construction was sanctioned in 1883 and it was opened in 1885.

Permanent way .- The permanent-way consists of 20-lb. flat-footed steel rails on Dick Kerr's patent iron and pyinkado sleepers.

Ballust. The line is ballasted throughout with sand, stone and laterite. Fencing. The line is unfenced.

Curres. The sharpest curve has a radius of 207 feet.

Gradients.—The raling gradient is 1 in 80.

#### Terms of contracts-

The Thaton-Duyinzaik Light railway is worked under the following: -

Contract of -10th January 1884 (between the Secretary of State and the late Mr. G. E. L. Dawson of Rangoon) for construction and working.

Agreement of-6th June 1896 for working the railway and a stram launch service between Moulmoin and Duyinzaik.

The general conditions are as follows:-

Government aid .- Land has been provided at a pepper-corn rent, and the proprietors receive Rs. 350 per mensom for the carriage of mails between Moulmein and Thaton, vid Duyinzaik, including both steamer and railway journeys.

Currency of contract .- The contract is in force for a period of 99 years. After the railway has been open for 80 years, and thereafter at intervals of 10 years, the Secretary of State can terminate the contract and take over the railway apon giving 12 months' notice, and paying the value of the permanent-way, buildings and rolling-stock, together with a bonus of 25 per cent. on the value. Government may also determine the contract if the radiway is not worked for six consecutive calendar mouths, or if the proprietors fail to carry out the agreement.

Terms of working .- The railway is now worked and maintained by the Irrawaddy Flotilla Company, who bought the

concern on the 1st December 1900.

Rates and fares .- Certain maxima have been fixed within which the proprietors are permitted to vary the rates. Statistics of working-Information not available.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 35 . DARJEELING-HIMALAYAN RAILWAY (2' 0" gauge)—

#### Details of construction-

The line, which is laid for a great part of its length along the cart road, is 51 miles long. Its construction was sanctioned in 1879 and it was opened through in 1881.

Permanent-way.—The section of the line in the plains is laid with 41\frac{1}{2}-lb. flat-footed steel rails on wooden sleepers. The hill section was laid with 41\frac{1}{2}-lb. flat-footed steel rails, these are being renewed with a special section steel rail, 41\frac{1}{2} lb. to a yard.

Ballast.—For 9 miles from Siliguri the line has been ballasted with gravel or broken stone, except near Siliguri where sand has been used. On the hill section, where necessary, broken stone ballast has been and is being put in.

Fencing .- The line is unfenced.

Curves.-The sharpest curve has a radius of 60 feet.

Gradients.—The ruling gradient of the greater part of the line is about 1 in 25; from Sukhua to Ghum (summit) and thence to Darjeeling there is a length of about three-fourths of a mile on grades of 1 in 22½ to 1 in 23.

#### Terms of contract-

The railway is worked under the following contract:-

Contract of -8th April 1879 (between the Secretary of State and the late Mr. Franklin Prestage) for construction, maintenance and working.

The general conditions of the contract are as follows:-

Government aid.—Government undertake to pay the Company such a sum as will make up its gross receipts to two lakes of rupees annually. Government land and the use of the existing cart road were granted free of cost.

Currency of contract.—If at any period the railway should not be worked for six consecutive months, the Company is to surrender the road and land acquired from Government, receiving any sums due to it for permanent improvements to the road or works connected therewith. After the railway has been opened for 25 years (reckoning from the 4th May 1884) and thereafter at intervals of 10 years, Government have the power, by giving 12 months' previous notice, to terminate the contract and take over the line on payment to the Company of its value as a dividend carning investment, with an additional bonus of 20 per cent. over and above such value.

Power of Company to surrender contract .- Nil.

Terms of working.—After the first five years, and subject to subsequent modifications of clause 16, half the not profits of any year in excess of 5 per cent. on the paid up capital to be applied in repayment to Government of the amount expended on the maintenance of the cart road during the same year or in making good a deficiency in gross receipts. Government are under obligation to uphold and maintain this road at their own expense, subject to their right to be repaid the charges incurred in any year out of one modety of the surplus profits earned in that year.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates. Statistics of working—

						Таньк І.					, TAR	LE IL
Calo	nda	r yea	r.	Capital ontlay to ond of each year.	Gross carnings.	Net carnings.	Per cent of net earnings on capital outlay.	Subsidy from Local Government,	Total income.	Por cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1880 1881 1882 1888 1884	:	:		Rs. 12,32,894 18,18,723 23,56,112 26,50,799 27,23,240	Rs. 48,483 2,61,154 3,66,474 4,21,944 4,35,024	Rs. 34,197 1,15,522 1,21,983 1,55,725 1,46,765	2:77 6:35 5:17 5:87 5:30	Rs	Rs. 34,197 1,15,522 1,21,983 1,55,725 1,46,765	2·77 6·35 5·17 5·87 5·39	Rs. 82 103 141 162 167	29·46 55·76 66·72 63·11 66·26
1885 1886 1887 1888 1869	:	:	•	27,27,823 27,32,136 27,43,214 27,71,926 29,40,423	4,31,103 4,96,476 4,77,151 6,14,893 5,74,294	1,63,350 2,41,559 2,10,623 2,83,327 2,29,117	5:99 8:86 7:63 10:22 7:80		1,63,350 2,41,559 2,10,623 2,83,327 2,29,117	5:09 8 86 7:63 10:22 7:80	163 188 180 233 217	62:11 51:28 55:86 53:92 60:10
1890 1891 1892 1893 1894	:	:	:	20,52,108 30,50,603 31,09,079 31,72,223 81,77,536	5,76,436 6,13,387 6,35,778 6,34,181 6,36,284	2,32,894 2,58,253 2,66,647 2,83,003 2,56,286	7:89 8:44 8:57 8:50 8:10	 1,55,418 29,756	2,32,894 2,58,253 2,66,647 1,28,495 2,26,530	7:89 8:44 8:57 4:02 7:13	231 240 239	59·00 57·61 57·46 55·41 59·27
1896 1896 1897 1898 1899	:	:	:	31,99,765 83,12,782 33,15,455 38,65,998 85,08,469	7,39,618 7,81,594 7,44,266 7,54,580 7,14,985	3,59,983 3,69,607 3,88,188 3,41,109 2,49,770	11:25 10:25 10:05 10:18 7:12	-61,740 -62,087 -55,929 -50,432 -34,938	2,97,580 2,77,259	9:32 8:98 8:36 8:37 6:12	285	50.92 53.98 55.28 54.79 65.07
1900 1901 1902 1903 1904 1905 1906	:	:	•	34,99,487 34,78,411 34,96,507 36,18,038 37,38,486 37,51,503 37,43,284	8,09,188 7,87,941 8,50,280 9,61,062 10,45,187 9,72,644 9,50,351	3,61,840 2,19,861 3,78,005 4,16,752 4,75,227 4,09,514 4,02,849	10°34 9°02 10°18 11°54 12°71 10°91 10°76	-64,268 -49,971 -67,704 -79,226 -97,200 -77,621 -75,126	8,37,526 3,78,027 3,31,893	8·50 7·58 8·88 8·79 10·11 8·47 8·75	305 207 321 363 394 367 370	55:28 60:17 54:66 56:65 53:46 57:70 58:91

# History of railways constructed and in progress.

[For Index see page 112]

Number Main head 36 Sub-head (a). HOWRAH-AMTA LIGHT RAILWAY (2' 0" gauge)

#### Running Powers-

Foreign line over Home line :-

Howrah-Sheakhala light railway, Telkul Ghat to Kadamtala, (for passenger and gools trains) 2:00 miles.

#### Details of construction-

There are 37:19 miles of open line, viz., main line (Telkul Ghat to Amta), 27:19 miles, and branch (Bargachia to Autpur), 10 miles. In addition to these 12:50 miles were sanctioned for construction in 1902, but the comme coment of work has not yet been authorized. The construction of the main line was sanctioned in 1895 and it was opened in 1898.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lbs. to the yard, on cross sleepers of pyinkado.

Ballast .- The line is ballasted throughout.

Fencing .- The line is unfenced.

Curves. - The sharpest curve, sanctioned specially for the town of Howrah, has a radius of 144 feet.

Gradients. The line is practically level throughout.

#### Terms of contracts-

The Howrah-Amta Light railway is worked on the terms contained in the Bongal Government Notifications No. 111, dated the 26th March 1895, and No. 75-R., dated the 7th April 1902, under the following agreements:—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

3rd May 1897 (between the District Board of Howrah and the Bengal District Road Tramways Company, Howrah-Amta).

16th August 1901 (between the District Board of Howrah and the Howrah-Amta Light Railway Company).

The general conditions are as follows :--

Aid by the District Board.—As subsidy for payment of interest, the District Board has guaranteed a sum sufficient to make the net earnings equivalent to Rs. 1,100 per annum per mile constructed and opened, limited to a maximum annual payment of Rs. 28,000. The free use of a width of 6 feet along one side of the district road, granted to the Company for the purpose of laying the line, a clear width of 11 feet being left for vehicular traffic

Currency of agreement.—The District Board has the power of determining the agreements after 21 years. In the event of the District Board exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act 3 of 1893 (Bengal Cods), the value to be placed upon the railway is to be calculated by adding to the value of the while undertaking, with all its equipments, as a dividend earning investment, a bonus of 20 per cent. over and above such value.

Terms of working.—Whenever the net earnings of the Company in respect of the railway are in excess of 4 per cent. upon the capital for the time being of the Company, surplus profits are divided between the Company and the District Board in equal proportions.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates. Statistics of working—

							TABLE	: I.				TAB	La II.
Cal	endi	ar y	'8a		Capital outlay to end of each year.	Gross earnings.	Net carnings.	Percent of net carnings on on pital outlay.	Subsidy from Pistrict Board	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to surnings.
					Rs.	Ra.	Rs.		Rs.	Rs.		Rs.	
1898				. ]	11,24,713	1,89,519	78,910	7:02	15,062	63,848	5.08	152	58-86
1899		•	æ		11,41,807	2,50,763	1,12,794	9.88	-27,835	84,959	7.44	168	55.02
L900				.	11,88,283	2,56,418	1,23,104	10.86	-80,244	92,860	7.81	172	51-99
901	•	•			11,96,697	2,60,530	1,14,092	9.23	-26,146	87,936	7:35	175	56·21
962					12,68,532	2,65,497	1,83,120	10.49	- 29,703	19,417	8.12	178	49.86
903					12,88,853	2,77,451	1,37,883	10.69	-31,883	1,05,950	8-22	186	50:32
904	•			.	15, <b>91</b> ,821	2,97,062	1,54,998	9.74	- 35,416	1,19,582	7:51	170	7:82
905		•		$\cdot$	16,07,464	8,28/723	1,77 464	11:04	-38,862	1,38,602	8.62	170	46.01
906				٠,	17,90,006	8,51,462	1,77,670	9.98	-38,681	1,38,989	7.76	182	49.45

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 97

HOWRAH-SHEAKHALA LIGHT RAILWAY (2' 0" gauge)-

### Running powers-

Home line over Foreign line :-

Telkul Ghat to Kadamtala, Howrah-Amta Light railway, (for passenger and goods trains) miles 2:00.

#### Details of construction-

The line is 19.75 miles long, riz., main line (Kadamtala to Sheakhala), 17.38 miles, and Chanditala-Janai branch 2.37 miles. The construction of the main line was sanctioned in 1895 and it was opened in 1897.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lbs. to the yard, laid on cross sleepers of pyinkado.

Ballast. - The line is ballasted throughout.

Fencing .- The line is unforced.

Curves.—The sharpest curve is of 144 feet radius at Howrah town.

Gradients .- The line is practically level throughout.

#### Terms of contracts-

The Howrah-Sheakhala Light railway is worked on the terms contained in the Bengal Government Notification No. 112, dated the 26th March 1895, under the following agreements:—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

16th July 1889 (between the District Board of Hooghly and the Bengal District Road Tramways Company).

The general conditions are as follows :-

Aid by the District Board.—The District Board of Hooghly have guaranteed to make up the net earnings to Rs. 950 per mile constructed and opened per annum. The free use of a width of 6 feet along one side of the district read, has been granted to the company for the purpose of laying the line, provided that there shall nowhere be a less width of metalled road clear of the inner rail of the line than 16 feet.

Currency of agreement.—The agreement is current for a period of 21 years. In the event of the District Boards exercising, in conjunction with the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act III of 1883 (Bengal Code), the price to be placed upon the tramway is to be calculated by adding to the value of the whole tramway with all its equipment as then constituted a bonus of 15 per cent, over and above such value.

Terms of working.—Whenever the net earnings of the company are in excess of 1 per cent. upon the capital of the company actually paid up and expended for the time being, surplus profits are divided between the company and the District Board of Hooghly in the proportion of two-thirds to the Company and one-third to the District Board.

Rates and farcs.—Certain maxima have been fixed within which the Company is permitted to vary rates.

-								Таз	stm 1.					Таві	e II.
	Ca	lend	ar yo	ar.			Capital outlay to end of cach year.	Gross carnings.	Not earnings.	Per cent. of not earnings on capital outlay.	Subsidy from , District Board.	Total income.	Per cent. of total income on cupital ontlay.	Earnings por mile por week.	Proportion of expenses to carnings.
		-					Rs.	Re.	Rs.		Rs.	Rs.		Rs.	
1 <b>89</b> 8							6,09,398	76,166	16,768	2.75	4,267	21,035	3.45	70	72-12
1899							6,09,434	73,396	21,453	3.22	-250	21,203	3.48	65	70.77
1900		•	•				6,09,146	76,019	26,824	4.40	999	25,825	4.31	74.	64.71
1901			•				6,09,416	75,579	23,165	8.80	1,108	24,278	3.68	77	70-52
1902							6,09,565	82,019	31,789	5.20	550	31,189	5.12	80	61.38
1908							6,14,715	87,049	€4,950	5.68	668	34,282	5.57	85	59.85
1904							6,14,715	86,261	89,055	6:35	-2,747	36,809	5.91	84	54-79
1905	•	:		•	•		6,1,3,608	88,266	38,128	6-21	2,419	35,709	5-82	86	56.80
1906		•		•		,	6,14,396	90,595	37,047	6.03	2,548	34,499	5-69	88	59-11
							1	J	1				1		1

# History of railways constructed and in progress.

[For Index see page 112.]

# Number Number Sub-head (a) - JORHAT (STATE) RAILWAY (2' 0" gauge)—

The line was constructed out of Provincial revenues by the Government of Assam for the convenience of the numerous tea gardens in the neighbourhood of Jerhat.

# Details of construction-

The line is 31.75 miles long, viz., main line (Berghep to Titzbar), 24.75 miles, and Mariani branch, 7 miles. Construction was sauctioned in 1.883; the main line was opened in 1887 and the branch in 1885.

Permanent-way.—Excepting 2.51 miles of the line between Jorhat and Gosaigaon, which is laid with steel rails 30-lb. to the yard, the rest of the line, including the section from Gosaigaon to Borghop, is laid with steel rails, 18-lb. to the yard.

Ballast.-The line is unballasted.

Fencing .- The line is not fonced.

Curves.-The sharpest curve is of 480 feet radius.

Gradients .- Four miles on a gradient of 1 in 800.

### Terms of contract-

The line is owned and worked by the State.

		_					•		n 	Cant. 10 T.	,				TAB	LB II.
		c	alond	lar y	oar.				Capital outlay to end of each year.	Gross carn- ings.	Not carnings.	Per cent. on capital outlay.	Interest.	iain or loss to the State.	Faruings per mile per work.	Proportion of expense to carnings.
	 								Ra.	Rs.	Rs.		Rs.	Rs.	Rs.	
884							•	٠	4,38,339	1,161	-483		17,533	-18,016	40	141-60
885			•		•	•	•		5,14,641	31,828	-7,455		19,395	-26,850	25	123-14
886				•	٠	•	•	٠	5,84,608	38,271	-13,887	•••	22,026	- 35,913	28	106-28
887						•	•	٠	6,79,372	49,199	13,772	•	26,608	- 40,3:0	32	127-99
898			•	•		•	•		7,10,376	55,477	75		27,807	-27,732	88	90.86
889						•	•	•	7,33,649	59,665	-3,543	•••	29,057	- 32,600	42	105-94
890					•	•	•		7,42,351	61,967	6,162	0.85	29,448	-23,286	41	90.00
891			•		•			•	7,51,421	64,563	1,453	0.20	30,026	-28,543	47	97:70
892					•			•	7,54,791	66,079	11,789	1.26	20,107	-18,318	48	82.16
893					•		•	•	7,99,680	69,810	14,436	1.81	32,013	-17,577	52	79.8
894					•			•	8,18,184	71,933	11,201	1.37	32,587	-21,386	52	84.4
895				•			•	•	8,29,409	84,696	18,720	2.26	32,919	-14,199	61	77.8
896					•				8,65,300	89,996	13,745	1.59	33,502	-19,817	65	84.7
897				•	•		•	•	9,02,416	96,186	14,124	1.57	86,102	21,978	69	85.8
898	•	•	•		•		•	•	9,09,415	95,958	20,135	2.21	36,179	-16,044	. 70	79.0
899	•	•				•	•	•	9,31,626	96,488	-5,946		87,228	-43,174	72	106-1
900		•	•	•	•	•	•	•	9,08,643	86,695	-15,664		86,341	-52,005	63	118-0
901		. •	•	•		•	•		9,01,038	83,181	-4,169		36,248	-40,417	56	105.0
902		•	•	•	•	•	•		8,95,693	86,641	-3,655		36,237	-39,892	57	104.9
903		•			•	•	•	•	9,03,843	90,710	13,594	1.51	36,408	-22,814	59	85-0
904	•	•			•	•		•	9,03,781	74,398	-8,840		36,260	-40,100	47	105-1
905	•	•	•	•	•		•	•	9,08,441	78,600	2,458	0.27	36,480	-84,022	50	96-8
906		•			٠.	•			9,09,185	92,540	12,995	1.43	87,419	-24,424	59	85.0

#### APPEN

	···		
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points,	Whether surveyed or not.
Λ		A self-content date of the self-content of the	11/4
Abasana-Suigam branch (Bombay)	.,, /		
Aden railway (Bombay)		(i) Aden and Nobat Dakim	Not surveyed
		viå Lahej,  Alternative	•
		(ii) Aden and Sheikh Othman and D'thala.	Ditto
Agra-Bharatpur railway (United Provinces and Rajputana) (New project).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Agra and Bharatpur	Survey sanctioned
Agra-Hathras railway (United Provinces).	Do.	Agra and Hathras	Surveyed
Allahabad-Benares railway (United Provinces).	Bengal and North-West- ern railway.	Allahabad and Benares	Ditto
	•	Mirzapur Branch	Ditto
Ammayanayakkanur-Uttamapalai- yam railway (Madras).	South Indian railway	Ammayanayakkanur and Uttama- palaiyam.	Surveyed
Amraoti-Ellichpur light railway (Central Provinces).	Great Indian Peninsula	Amraoti and Ellichpur	Surveyed
Amraoti-Sonnair railway (Central Provinces) (New project).	Ditto	Amraoti & Sonnair viå Morsi	Under survey
Arakan Coast extensions (Burma)	******	*****	******
Arsikere—Mangalore railway (Mysore and Madras).	Southern Mahratta railway	Arsikere and Mangalore	Surveyed
Assam-Burma connection railway (Eastern Bengal and Assam, and Burma).	Assam-Bengal railway.	(i) Chittagong-Akyah-Minhla (Aeng pass route).  Alter, atives	Surveyed ,
, 		(ii) I umding-Maripur-Tam mu- Yuwo-Kyathin (Manipur route).	Do
		(iii) Makum to Mogaung (Hu- kong Valley route).	Do
		(iv) Chittagong Zadabin-Prome.	
		Prome to Zadabin	Do
		Taungup branch	Do
· ·		Zadabin to Zibingyi	Reconnoitred
Auriya-Rura railway (United Provinces) (New project).	East Indian railway	Auriya and some point between Cawnpore and Phaphund (say Rura).	Survey sanctioned
Azamgarh-Goshainganj United Provinces	Bengal and North-West- ern railway.	Azamgarh and Goshainganj	Under survey
В			•
Bachhwara-Rowsara branch (Bengal).	Bengal and North-West- ern railway (Tirhoot section).	Bachhwara and Rowsara	Not surveyed
Badin-Jungshahi extension (Bombay).		••••	*****
Bagalkot-Hungund branch	Southern-Mahratta rail- way.	Bagalkot and Hungund	Surveyed

DIX 38-A.
corrected up to 31st December 1906.

_	1	<del></del>	T	
	Gauge.	Length.	Estimated cost.	Remarks,
		Miles,	Rs.	
				See "Deesa-Tharad railway."
	2' 6"	40	•	The consideration of the question of railway construction at Aden has been deferred.
	5′ 6″	33		This line has been proposed with a view to making Agra one of the termini of the Nagda-Muttra railway, which is now under construction.
	3' 3%"	30		The survey has been completed but the results have not yet been received by the Radway Board.
	3′ 3∛″	91'7	49,48,539	The chief object of this project is to place the metre gauge lines of the Doahs in direct and unbroken communication with the capital of the United Provinces.
	3′38″	10.3	5,20,000	The line has been brought under construction since the close of the year.
	3′38″	61.46		This line has been proposed by the District Board of Madura who are levying a special cess for promoting railway construction in the district. It was originally intended that the line should start from Dindigul, but at the suggestion of the Agent, South Indian railway, Ammayanayakkanur has been adopted as the point of junction
	2′ 6″	30.64	7,92,953	with that line. The survey has been completed and the results are awaited.
	5′ 6*	tco	•••	
		•••	•••	See "Prome-Taungup" and "Zadabin-Zibingyi" under "Assam- Burma connection railway."
	2' 6"	135'71	85,43,784	The line is intended to afford connection between the coffee estates on and near the top of the Mysore plateau with Mangalore port. The Arsikere-Hassan section (27.81 miles) is estimated for a metre gauge substructure, owing to the probability of its eventually forming part of the Mysore-Arsikere chord.
	3' 3³³°	450	7,00,00,000	The results of the surveys of the first three routes were forwarded to the Secretary of State for India in 1896, when the Government of India recorded the opinion that they were unable to support the immediate construction of any of the projected lines: as there was no prospect of any of them being commercially recorded the projected lines.
	3′ 3₹″	3 <sup>8</sup> 5	6,50,00,000	pect of any of them being commercially successful, and that, while the Military authorities preferred the Manipur route, the connection was of no urgency from either a political or military standpoint.  The fourth and most southerly of these routes includes branches to
	3' 3}"	284	<b>3,</b> 83,00 <b>,</b> 000	Taungup and Akyab and was proposed in 1905 by the Government of Burma, who carried out from Provincial funds the survey from Prome to Zadabin and Taungup and the reconnaissance from Zadabin to Zibingyi, and urged the carrying out from Imperial funds of a detailed survey of the Zadabin-Chittagong section, including the Akyab branch. The proposal is under consideration. [See also
l	3′ 38″	1007	2,48,89,800	"Buthidaung-Maungdaw railway".]
	3' 3%"	. 4	2,72,500	
	3' 3 <del>1</del> "	170	1,87,00,000	,
1	lot stated, pro- bably 5' 6".	19	•••	<b>₩</b>
	3' 3 <b>}"</b>	59	***	. '
	3' 3 <b>1'</b> '	14	5,50,000	
	<b>,,,</b>	, <b></b>		See "Lower Sind branches."
	3′ 31°	31	<b>24,41,7</b> 57	This line will form a feeder to the Bijapur branch of the Southern Mahratta railway.

# APPEN

	Ţ		
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
B-contd.			
Bahadarpur (Garda)-Songhir exten- sion (Bombay).	Bombay, Baroda and Central India railway (Gaekwar's Dabhoi).	Bahadarpur and Songhir	Surveyed
Balamau-Sitapur railway (United Provinces).	Oudh and Rohilkhand railway.	Balamau and Sitapur	Surveyed
Bangalore (Taragupet)-Chikballa- pur light railway (Mysore).	Southern Mahratta rail-	Bangalore and Chikballapur	Surveyed
Bankura (or Bishenpur)-Calcutta chord railway (Bengal).	Bengal-Nagpur railway	Bishenpur vid Bhandarhati, and Hooghly or Howrah or that neighbourhood.	Surveyed
•			
	¢.		
Bansdih road-Maneerghat branch (United Provinces).	Bengal and North-West- ern railway.	Bansdih road and Mancerghat.	Under survey
Baran•Marwar railway (Raj- putana).	Bombay, Bareda and Cen- tral India railway (Rajputana-Malwa).	Baran and Marwar with extensions—	Surveyed
	(Na)putan - Maiwa).	(i) ]chazpur to Nasirabad	Do
		(ii) Jehazpur to Paondero	Do
Baran-Nasirabad <b>ra</b> ilway (Raj- putana).	*****	*****	*****
Baroda-Savli railway (Bombay)	Bombay, Baroda and Central India railway (Gackwar's Dabhoi),	Baroda and Savli	Surveyed
Barwaha-Bodeli light railway (Central India).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Barwaha to Bodeli	Reconnoitred
•	, ,, , , , , , , , , , , , , , , , , , ,	Alternative.	
	D	Barwaha to Nandod	Ditto
Baura-Matabhangah-Konaghat ex- tension (Eastern Bengal and Assam).	Bengal Dooars railway	Baura and Konaghat	See "Remarks"
Bausi-Baidyanath railway (Bengal)	East Indian railway	(i) Bausi to Baidyanath  Alternative.	Surveyed
•		(ii) Bausi to Adjai	Do
Belapur (or Lakh)-Sangamner branch (Bombay).	Great Indian Peninsula railway.	Lakh and Sangamner	Reconnoitred
Bellarpur-Watangal railway (Cen- tral Provinces and Hyderabad, Nizam's).	कुः ••••••	13 × 589	
Belo-Shahbunder light railway (Bombay).	******		
Berhampur-Gopalpur light railway		*****	001910
Berhampur-Russelkonda light rail- way (Madras).	*** * * *	******	******
Bezwada-Jaggiapett branch (Mad-	Madras railway	Bezwada and Jaggiapett	Not surveyed
Bhagalpur-Nalhati (or Ahmadpur) railway (Bengal).	East Indian railway	Bhagalpur and Nalhati or Ahmadpur,	Do

DIX 88-A—continued.

corrected up to 31st December 1906.

Length.	Estimated cost.	Remarks,
<b>5.2</b> 71-		
8 (Bahadarpur to	• 5,84,000	The line will be constructed by the Baroda Durbar in whose torritory it will entirely lic.
37'12	19,45,446	The Secretary of State has approved of the construction of this line as part of the Oudh and Rohilkhand railway.
38.99	7,19,765	No application has yet been made to the Railway Board for the con- struction of this line.
Sec "Re	marks."	The length and estimated cost are as follows:-
		Miles.  Bishenpur to Hooghly 71'44 { Double line . 1,32,55,476 Single
		if constructed at Cossipore, or Rs. 54,46,956 for 5't9 miles, if con- structed at Panihati.
13		The line has been proposed by the Bengal and North-Western railway as a feeder to their main line.
313.30	1,36, <b>6</b> 6,80 <b>6</b>	Two lines were surveyed in 1898-99, vis., Baran to Nasirabad and Baran to Marwar, the length and cost of the former being 153'29
60	Not given separ- ately.	miles and Rs. 96,11.662, respectively. The Baran-Kotah section of this line is under construction.
70.85	31,62,877	
		See." Baran-Marwar railway."
32		The results of survey have not yet been submitted.
163 <del>}</del>	54,28,691	The alternative to Nandod includes a bridge over the Nerbudda, which partly accounts for the higher cost.
1931	72,49,284	
20		The survey of this line by the agency of the Bengal Dooars railway was sanctioned by the Government of India in 1900, but the results have not yet been received.
44'43	32,35,066	
44'94	32,96,899	
32.86	***	An alternative alignment, four miles shorter, from Belapur vid Bab- lishwar, was also examined but the estimates of cost have not been submitted.
•••	***	See "North and South sailway."
***	601	See " Light railways in Sind."
•••		See " Ganjam District Light railways."
•••	•••	Ditto.
54	43,50,000	
- -		This line will probably be constructed by the East Indian Railway Company.
	Miles.  8 (Bahadarpur to Heran river).  37'12  38'99  See "Re  13  213'39  60  70'85  32  163\frac{1}{2}  20  44'43  44'94  32'86	Miles. Rs.  8

APPEN

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not-
B-concld.			
Bhamo-Momein (Fengyueh) railway (Burma).	Burma railways across a ferry between Bhamo and Katha.	Bhamo and Momein	Reconnoitred
Bhatni-Bettiah extension (Bengal)	Bengal and North-West- ern railway.	Bhatni and Bettiah	Partly surveyed
Bhojudih-Daltonganj railway (Bengal).	Bengal-Nagpur railway	Bhojudih and Daltonganj	Surveyed
Bilaspur-Mungeli-Mandla railway (Central Provinces).	Bengal-Nagpur railway	Bilaspur and Mandla	Under survey
Bir-Bhopal railway (Central India and Central Provinces). (New project.)	Great Indian Peninsula railway.	Bir and Bhopal	Being reconnoitred
Bishenpur (or Bankura)-Calcutta		<b></b>	
Bombay-Sind connection railway (Cutch, Sind and Bombay).	Bombay, Baroda and Cen- tral India railway.	Viramgam and Badin— (1) Northern route (ii) Cutch route	Reconnoitred Do
Bombay-Southern Mahratta railway (Bombay).	Southern M. H., atta rail-	Karad Road and Hogg Island and Vingorla.	Not surveyed
Borawar (or Degana)-Hissar railway (Rajputana and Punjab),	Jodhpur-Bikaner railway	Borawar (or Degana) and Hissar	Under survey
Borjan-Suntak tramway (Eastern Bengal and Assam),	Assam-Bengal railway	Borjan and Suntak	Not surveyed
Broach-Jambusar-Masor Road railway (Bombay).	Bombay, Baroda and Central India railway.	Broach and Masor Road	Not surveyed
Burdwan-Kutwa railway (Bengal)	East Indian railway	Burdwan and Kutwa	Surveyed
Buthidaung-Maungdaw railway (Burma).	*****	Buthidaung and Maungdaw	Surveyed for a 2' o" trainway.
C			
C. CACHAR DISTRICT TRAMWAYS—			
Sealtick—Lala Bazar (Eastern Bengal and Assam). Silchar—Duarbund (Eastern Ben- gal and Assam). Silchar—Tikalpur (Eastern Ben- gal and Assam).	Assam-Bengal railway	Scaltick and Lala Bazar Silchar and Duarbund Silchar and Tikalpur	Reconnoitred by the promoters. Ditto
Calcutta Central railway (Bengal)	East Indian railway .	Howrah and Sealdah	Not surveyed
	·		
Captainganj-Padrauna branch (United Provinces).	Bengal and North-West- ern railway.	Captainganj and Padrauna	Not surveyed

DIX 38-A-continued.

# corrected up to 31st December 1906.

Gauge.		Length.	Estimated cost.	Remarks.
	1	24.0	Rs.	
		M iles.		
2′	67	124	1,14,42,000	A detailed survey has been sanctioned and is in progress.
3′ :	387	50	<b></b> .	The survey was carried out in 1903 up to the east bank of the Gandak river, about 42 niles, and was then abandoned by the Bengal and North-Western radway.
5'	6"	17 <b>1</b>	1,68,00,000	
· 2'	6"	170		This line will shorten the distance between Nainpur, the centre of the Satpura system, and Calcutta by about 56 miles.
5'	67	110		This line has been proposed as an alternative to the doubling of the section from Itarsi to Bhopal.
				See "Bankura (or Bishenpur)-Calcutta railway."
5' 5'	6" 6"	269 30. <b>‡</b>	2,12,73,0°0 2,36,14,250	These routes were reconnoited during 1906. Both start from Virangan; and terminate at Badin. The northern route passes through Radhanpur, Suigam, Nagar Parker and Rohim-ki-Bazar, while the soul ern route, which traverses the territory of His Highness the Rao of Cutch, goes vid Malia, Anjar, Bhuj and Lakhpat.
3'	337	202	1,58,09,000	
3′	38"	180	33.07,790	This line has been proposed by the Jodhpur and Bikaner Durbars for construction and working as part of the Jodhpur-Bikaner railway. It will be about 200 miles in length if Degana be taken as the initial point. It will probably supersede the Kuchaman-Sirsa chord railway.
6 miles 3'	38"	} 8		
2'	6•	31		The Baroda Durbar offered to construct the line in 1903, but have since abandoned it.
5'	6"	34	26,49,418	This line will probably be constructed by the East Indian railway as part of their undertaking when lunds are available.
3'	38"	17.25		The Arakan Company, Limited, are negotiating with the Government of Burma for the construction of this line, with the possibility of its ultimate absorption in the Prome-Zadabin-Chittagong scheme. [See "Assam-Burma railway connection".] This proposal is under consideration. The original proposal by the Company was for a 2'0" tramway (for which alone a survey has been made) at an estimated cost of Rs. 9,49,858. It has since been dropped.
				The Railway Board have approved of a survey being catried out on the 3' 33' gauge at the expense of Government.
2'	6"	24	h	
. 2'	6"	22	14.75,405	These lines were proposed in the interests of the tea industry and as
2'	67	14	}	feeders to the Assam-Bengal railway. The proposals fell through owing to the inability of the Local Administration to guarantee interest on capital at 3 per cent. per annum which the promoters had asked for.
5'	6*		£1,500,000	The scheme comprised a permanent road and railway tridge over the Hooghly at the site of the existing floating bridge, a central parsenger station at Calcutta and an elevated junction railway to unite the East Indian and Rastern Bengal State railways and the Kidderpore docks. The estimated cost represents the total capital proposed to be raised, the figure being increased to £2,750,000 if a broad avenue to afford access to the Central station from Howrah he included in the scheme. In view of the objections of the Special Committee appointed to report on the scheme, the opinions expressed by the Government of Bengal and the fact that the project did not receive the support of those most interested in its execution, the offer made in 1898 by a Syndicate to fosm n company to undertake the work was not accepted.
3'	31"	18		

#### APPEN

	*	£	
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
C -concld.			
Cawnpore-Banda railway (United Provinces) (New pro- ject).	Great Indian Peninsula railway.	Cawnpore to Banda via Hamirpur and Maudha, with a branch from Maudha to Harpalpur via Rath.	Under survey
Cawnpore-Hamirpur railway (United Provinces).	East Indian railway	Cawnpore to the river Jumna opposite Hamirpur.	Not surveyed
		c	
Cawnpore-Rae Bareli-Fyzabad railway (United Provinces).	Great Indian Peninsula railway.	Cawnpore and Fyzabad	Partly surveyed
Changa Manga-Chunian-Pak- patan branch (Punjab).	North Western railway	Changa Manga and Pakpatan	Not surveyed
	r		
Chansama-Harij railway exten- sion to Kathi (Bombay) (New project).	Bombay, Baroda and Central India railway (Gackwar's Mchsana)	Harij and Kathi	Not stated
Chicacole Road—Calingapatam light railway (Madras). Chicacole Road-Gunipur light rail- way (Madras). Chicacole Road—Parvatipur light railway (Madras).	}		
Chhor-Tatta railway (Bombay)		•••	•••
Chupra-Mashrak railway (Bengal)	Bengal and North- Western railway.	Chupra and Mashrak	Under survey
Cuddalore-Vriddhachalam railway (Madras).	South Indian railway	Cuddalore and Vriddhachalam	Surveyed
D.			
Dacca-Aircha extension (Eastern Bengal and Assam).		•••	•••
Dacca-Mymensingh railway extensions (Eastern Bengal and Assam)	Dacca section, Eastern Bengal State railway.	(i) Dacca to Aircha  Alternative.	Surveyed
		Tangi, vid Dassora, to Aircha.	Do
		(ii) Mymensingh, vid Netrokona to Bara Ari, with a branch from Shambhuganj to Gauripur.	Do
		(iii) Singhjani, vid Sherpur, to Nalitabari.	Do. •
		(iv) Netrokona to Langar Bazar	Do
Dalla-Dedaye railway (Burma)	Burma railways	Dalla to a point opposite Dedaye	Reconnoitred
		With a branch to Twante	Do
Damoh-Atarra light railway (Central Provinces and Central India).	Great Indian Peninsula railway.	Damoh and Atarra	De
Darbhanga-Khagaria chord (Bengal).	Bengal and North-West- ern railway. (Tirhoot section.)	Darbhanga and Khagaria	Under survey
Darrang District tramway (Eastern Bengal and Assam).		******	*****
	I	·	I

DIX 38-A—continued.

# corrected up to 31st December 1906.

agreed to guarantee interest on working capital at 4 per cent. condition of receiving a moiety of surplus profits. In 1905 in promoters intimated that they did not desire to proceed we have accounted that they did not desire to proceed we have a considered by the late Indian Middland Railway. Considered by the late Indian Middland Railway, and the rest are awaited.  5 6' 70 56,00,000 This branch was selected by the Committee, appointed by the Puni Government in 1870 to report upon railway feeders as the manual of the surplus and the rest are awaited.  5 6' 70 56,00,000 This branch was selected by the Committee, appointed by the Puni Government in 1870 to report upon railway feeders as the manual of the register and the right bank of the Surpli. The major port of this line will be merged in the Patti-Lodhran railway, which at present under survey.  5 6' 71 70 This line will probably be constructed by the Baroda Durbar in whe territory it will entirely be.  5 6' 8 70 See under "Light railways in Sind."  5 8 8 9 18 18 18 18 18 18 18 18 18 18 18 18 18				
Miles.  S' 6'  147  This will include the Cawopere-Hamirpor railway project.  The line is assumed to cost Rs. \$5,000 per mile on the s' 6' gauge. Proposals were received in 1994 for its construction as a stee transway on the s' ague. The District Board of Campagnered to guarantee interest on working capital at a per cent. condition of receiving a moiety of surplus profits. In 1994 and a pagreed to guarantee interest on working capital at a per cent. condition of receiving a moiety of surplus profits. In 1995 and the scheme. The Cawopere Band railway will include this line.  This line was proposed by the International Milland Railway Company in 1899. The Cawopere Band railway will and the scheme. The Cawopere Band railway will are railway freders, as the me suitable out of many projects put forward for serving the scheme was called that the Subtle. The moley port of the scheme is the scheme of the right lank of the Subtle. The moley port of the scheme is the scheme of the right lank of the Subtle. The moley port of the scheme is the scheme in the scheme and for serving at a present under survey.  3' 3l' 7l See under "Ganjam District light railways."  See under "Ganjam District light railways."  See under "Dacca-Mymensingh railway extensions."  The results of survey have not yet been received by the Railway and the scheme is the scheme of the received by the Railway and the scheme is the scheme of the scheme is the scheme of the scheme is the scheme of the scheme is the scheme of the scheme is the scheme of the scheme is the sch	Gaurra	Langeh	Detimated east	Panagra
This will include the Campore-Hamirpur railway project.  The line is assumed to cost Rs. \$2,000 per mile on the \$10'' gauge. Proposals were received in 1914 for its construction as a set agreed to guarantee interest on working capital at 4 per cent. condition of receiving a moiety of surplus profits. In 1916 per cent. condition of receiving a moiety of surplus profits. In 1916 per cent. condition of receiving a moiety of surplus profits. In 1916 per cent. condition of receiving a moiety of surplus profits. In 1916 per cent. condition of receiving a moiety of surplus profits. In 1916 per cent. condition of receiving a moiety of surplus profits. In 1916 per cent. condition of receiving a moiety of surplus profits. In 1916 per surplus profits and the proposed by the late Indian Middand Railway, and the rest are a surface.  5 6' 70 \$5,00,000 This line was proposed by the Item Indian Middand Railway, and the rest are a surface. The composition of the sine will be merged in the Patti-Lodiran railway, which at present under survey.  3' 3i' 11	Gauge,	Lengta.	Estimated cost.	REMARKS.
This will include the Campore-Hamirpur railway project.  The line is assumed to cost Rs. 15,000 per mile on the 3'0' gauge. Proposals were received in 1914 for its construction as a set agreed to gavarate interest on working capital at 4 per cent. condition of receiving a moiety of surplus profits. In 1915 promoters intimated that they did not desire to proceed we the scheme. The Campore-Banda railway will include this line.  5' 6' 10 55,00,000 This line was proposed by the late Indian Midland Railway Copany in 1899. The Campore-Rae Barriel section, 33 miles, 1 been surveyed bythe Outh and Kholikund cailway, and the rest are availed.  5' 6' 70 55,00,000 This branch was selected by the Committee, appointed by the Gowernment in 1890 in report upon railway leaders, as the manifested tract or whe right bank of the Sutie). The major port of this line will be merged in the Patti-Lodiran railway, which at present under survey.  3' 3i' 3i' 3i' 3i' 3i' 3i' 3i' 3i' 3i' 3				•
The line is assumed to cost Rs. 15,000 per mile on the s' G' gauge.  The line is assumed to cost Rs. 15,000 per mile on the s' G' gauge.  Proposals were received in 1904 for its construction as a set tramway on the s' gauge.  The District Board of Caway or the District Board of Caway or the great of the garden of carry of the scheme. The Cawapore Bandara Talway will include this line.  5' 6' 70 55,00,000  This ine was proposed by the late Indian Midland Railway Copany in 1899. The Cawapore Bandara Talway will include the sine.  This line was proposed by the late Indian Midland Railway Copany in 1899. The Cawapore Bandara Talway will include the fine.  This branch was selected by the Committee, appointed by the Puni Government in 1992 to report upon calway tedests, as the mineral control of the line will be merged in the Patti-Loditran railway, which at present under survey.  This line will probably be constructed by the Baroda Durbar in what territory it will entirely lie.  See under "Ganjam District light railways."  See under "Light railways in Sind."  See under "Dacca-Mymensingh railway extensions."  The results of survey have not yet been received by the Railway and Sind."  See under "Dacca-Mymensingh railway extensions."  The results of survey have not yet been received by the Railway and Sind."  See under "Dacca-Mymensingh railway extensions."  The results of survey have not yet been received by the Railway and Sind."  See under "Dacca-Mymensingh railway extensions."  The results of survey have not yet been received by the Railway and Sind."  See under "Dacca-Mymensingh railway extensions."  The results of survey are received in 1904, from a Syndicate, for the constant of the survey and survey are not with terms on which concession could be granted.  The line was proposed to serve the delta of Lower Burma. Would have to contend against keen river competition and, therefore the survey are waited.  The line was proposed to serve the delta of Lower Burma. Would have to contend against keen river competition		Miles.	Rs.	
Proposals were received in 1904 for its construction as a state tramway on the 2 gauge. The District Board of Cawap agreed to guarantee interest on working capital at per cent.  5' 6' 140 1,12,00,000  1,12,000  1,12,000	5' 6"	147	•	This will include the Cawapore-Hamirpur railway project.
pany in 1890. The Camparo-Rea Bardi section, 15 miles been surveyed by the Outh and Kohikund callway, and the rest are awaited.  5' 6' 70 55,00,000 This been surveyed by the Committee, appointed by the Pani Government in 1896 to report upon railway feeders, as the matche out of many projects put forward for serving the rurigated tract of the right bank of the Sutte). The major part of the ine will be merged in the Patit-Iodhran railway, which at present under survey.  13' 3\$' 7\$ This ine will be merged in the Patit-Iodhran railway, which at present under survey.  15' See under "Light railways in Sind."  16' See under "Light railways in Sind."  17' See under "Light railways in Sind."  18' See under "Dacca-Mymensingh railway extensions."  19' 3\$' 45 75,71,060  20' 3\$' 45 75,72,105  21' 3\$' 3\$'' 45 75,72,105  27,26,812 Includes the cost of a bridge over the Brahmaputra. If a fe instead of a bridge, be provided, the cost would be Rs. 2002 tion of the Mymensingh-Nertokon arilway on the metric constitution of the Mymensingh-Nertokon arilway on the metric constitution of the Mymensingh-Nertokon arilway on the metric constitution of the Mymensingh-Nertokon arilway on the metric constitution of the Mymensingh-Nertokon arilway on the metric consension could be granted.  2' 5' 12,38,886		353		The line is assumed to cost Rs. 15.000 per mile on the 2'6" gauge.  Proposals were received in 1904 for its construction as a steam tramway on the 2' gauge. The District Board of Cawnpore agreed to guarantee interest on working capital at 4 per cent. on condition of receiving a moiety of surplus profits. In 1905 the promoters intimated that they did not desire to proceed with the scheme. The Cawnpore-Banda railway will include this line.
Government in 1896 to report upon railway feeders, as the m suitable out to framy projects put forward for serving the r irrigated tract of white right bank of the Sutili. The major port of this line will be merged in the Patit-Lodiran railway, which at present under survey.  This line will probably be constructed by the Baroda Durbar in whiterritory it will entirely he.  See under "Ganjam District light railways."  See under "Light railways in Sind."  3' 31"  34 "	5′ 6″	140	1,12,00,000	This line was proposed by the late Indian Midland Railway Company in 1899. The Cawnpore-Rae Bareli section, 58 miles, has been surveyed by the Oudh and Rohilkund railway, and the results are awaited.
See under "Ganjam District light railways."  See under "Light railways in Sind."  The results of survey have not yet been received by the Railw Board.  The results of survey have not yet been received by the Railw Board.  See under "Dacca-Mymensingh railway extensions."  The results of survey have not yet been received by the Railw Board.  Includes the cost of a bridge over the Brahmaputra. If a fe instead of a bridge, be provided, the cost would be Rs. 20,92, Proposals were received in 1994, from a Syndicate, for the const tion of the Mymensingh-Netrokona railway on the metre gauge of the Singhjani-Netrokona railway on the metre gaug	5' 6"	70	56,00,000	This branch was selected by the Committee, appointed by the Punjab Government in 1896 to report upon railway feeders, as the most suitable out of many projects put forward for serving the rich irrigated tract of the right bank of the Sutlej. The major portion of this line will be merged in the Patti-Lodhran railway, which is at present under survey.
See under "Light railways in Sind."  3' 3\frac{1}{3}\frac{1}\frac{1}{3}\frac{1}{3}\frac{1}{3}\frac{1}{3}\frac{1}{3}\frac{1}{3}\frac{1}{3}\frac{1}{3}\frac{1}{3}\frac{1}{3}\frac{1}{3}	3' 33"	71		This line will probably be constructed by the Baroda Durbar in whose territory it will entirely lie.
See under "Light railways in Sind."  3' 3\frac{3}{3}\toperate{\text{sight}} 21 \toperate{} \toperate{} \text{See under "Light railways in Sind."} \tag{See under "Light railways in Sind."} The results of survey have not yet been received by the Railway and the Railway and the Sacration of the Market of a bridge over the Brahmaputra. If a feature of a bridge, be provided, the cost would be Rs. 20,92; Proposals were received in 104, from a Syndicate, for the constitution of the Market of Singhian-Netrokona railway on the metre gauge of the Singhian-Netrokona railway on the metre gauge o		,		
3' 3\(\frac{3}{3}\) 21  3' 3\(\frac{3}{3}\) 34  34  35  36  36  37  38  38  38  39  30  31  32  33  34  34  35  36  37  38  38  39  30  30  30  31  32  33  34  34  34  35  36  37  38  38  38  39  30  30  30  31  32  33  34  34  34  35  36  37  38  38  39  30  30  31  32  33  34  34  34  35  36  37  38  38  39  30  30  30  31  32  33  34  34  34  34  35  36  36  37  38  38  38  39  30  30  30  30  30  30  31  32  33  34  34  34  34  34  34  34  34  34  34  35  36  36  37  38  38  38  39  39  30	***		•••	See under "Ganjam District light railways."
3' 3\(\frac{3}{3}\) 21  3' 3\(\frac{3}{3}\) 34  34  35  36  36  37  38  38  38  39  30  31  32  33  34  34  35  36  37  38  38  39  30  30  30  31  32  33  34  34  34  35  36  37  38  38  38  39  30  30  30  31  32  33  34  34  34  35  36  37  38  38  39  30  30  31  32  33  34  34  34  35  36  37  38  38  39  30  30  30  31  32  33  34  34  34  34  35  36  36  37  38  38  38  39  30  30  30  30  30  30  31  32  33  34  34  34  34  34  34  34  34  34  34  35  36  36  37  38  38  38  39  39  30				See under "Light railways in Sind."
Board.  See under "Dacca-Mymensingh railway extensions."  3' 3\frac{1}{2}" 45 75,72,105  3' 3\frac{1}{2}" 31		1	ļ	
3' 3\(\frac{1}{3}\) 45 76,71,060  3' 3\(\frac{1}{3}\) 45 75,72,105  3' 3\(\frac{1}{3}\) 36'5  27,26,812  Includes the cost of a bridge over the Brahmaputra. If a fe instead of a bridge, be provided, the cost would be Rs. 20,92, Proposals were received in 1904, from a Syndicate, for the constition of the My mensingh-Netrokona railway on the metre gauge of the Singhjani-Sherpur-Nalitabari line on the 2' 6' gauge.  3' 3\(\frac{1}{3}\) 25  12,38,886  For a well equipped line, with ferry. For a cheap line with, without, ferry the cost is estimated at Rs. 9,21,250 and Rs. 8,40,32 respectively.  The results of survey are awaited.  The line was proposed to serve the delta of Lower Burma. would have to contend against keen river competition and, therefore the proposed state of the proposed	3′ 38°	34	•••	The results of survey have not yet been received by the Railway Board.
3' 3\(\frac{1}{3}\) 45 76,71,060  3' 3\(\frac{1}{3}\) 45 75,72,105  3' 3\(\frac{1}{3}\) 36'5  27,26,812  Includes the cost of a bridge over the Brahmaputra. If a fe instead of a bridge, be provided, the cost would be Rs. 20,92, Proposals were received in 1904, from a Syndicate, for the constition of the My mensingh-Netrokona railway on the metre gauge of the Singhjani-Sherpur-Nalitabari line on the 2' 6' gauge.  3' 3\(\frac{1}{3}\) 25  12,38,886  For a well equipped line, with ferry. For a cheap line with, without, ferry the cost is estimated at Rs. 9,21,250 and Rs. 8,40,32 respectively.  The results of survey are awaited.  The line was proposed to serve the delta of Lower Burma. would have to contend against keen river competition and, therefore the proposed state of the proposed				See under "Dacca-Mymensingh railway extensions."
3' 38"  36'5  27,26,812  Includes the cost of a bridge over the Brahmaputra. If a feinstead of a bridge, be provided, the cost would be Rs. 20,928, Proposals were received in 1994, from a Syndicate, for the constition of the Mymensingh-Netrokona railway on the metre gauge of the Singhjani-Sherpur-Nalitabari line on the 2' 6" gauge. promoters were informed in the same year of the terms on which concession could be granted.  For a well equipped line, with ferry. For a cheap line with, without, ferry the cost is estimated at Rs. 9,21,250 and Rs. 8,40,3 respectively.  The results of survey are awaited.  The line was proposed to serve the delta of Lower Burma. would have to contend against keen river competition and, therefore its prospects are not promising.  This line was put forward by the late Indian Midland Railway Copany in 1899 as a feeder to their railway system.				
3' 3\frac{3}{3}\frac{3}{3}\frac{3}{3}\frac{5}{3}\frac{3}{3}\frac{5}{3}5	3' 37"	45	76,71,060	
sinstead of a bridge, be provided, the cost would be Rs. 20,922, Proposals were received in 1904, from a Syndicate, for the constition of the Mymensingh-Netrokona railway on the metre gauge of the Singhjani-Sherpur-Nalitabari line on the 2' 6" gauge. 'promoters were informed in the same year of the terms on which concession could be granted.  3' 3\frac{3}{4}"  25  12,38,886  For a well equipped line, with ferry. For a cheap line with, without, ferry the cost is estimated at Rs. 9,21,250 and Rs. 8,40,27 respectively.  The results of survey are awaited.  The line was proposed to serve the delta of Lower Burma. would have to contend against keen river competition and, therefore its prospects are not promising.  This line was put forward by the late Indian Midland Railway Company in 1899 as a feeder to their railway system.	3' 3%"	45	75,72,105	
without, terry the cost is estimated at Rs. 9,21,250 and Rs. 8,40,2 respectively.  The results of survey are awaited.  The line was proposed to serve the delta of Lower Burma, would have to contend against keen river competition and, therefore its prospects are not promising.  This line was put forward by the late Indian Midland Railway Company in 1899 as a feeder to their railway system.	3' 3}"	36'5	27,26,812	Includes the cost of a bridge over the Brahmaputra. If a ferry, instead of a bridge, be provided, the cost would be Rs. 20,92,797.  Proposals were received in 1904, from a Syndicate, for the construction of the Mymensingh-Netrokona railway on the metre gauge and of the Singhjani-Sherpur-Nalitabari line on the 2'6" gauge. The promoters were informed in the same year of the terms on which a concession could be granted.
3' 3\frac{3}{4}"  3 3\frac{3}{4}"  3 4\frac{3}{4}\$  3 4\frac{3}{4}\$  3 4\frac{3}{4}\$  3 4\frac{3}{4}\$  3 4\frac{3}{4}\$  4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3' 3%	25	12,38,886	For a well equipped line, with ferry. For a cheap line with, and without, ferry the cost is estimated at Rs. 9,21,250 and Rs. 8,40,250,
3' 38"  141  7,11,472  would have to contend against keen river competition and, therefore its prospects are not promising.  This line was put forward by the late Indian Midland Railway Company in 1899 as a feeder to their railway system.	3' 3 <del>1</del> "	50.2	•••	
2' 6' 151 27,18,000 This line was put forward by the late Indian Midland Railway Copany in 1899 as a feeder to their railway system.  3' 3\$'' 59 ••••		1		The line was proposed to serve the delta of Lower Burma. It would have to contend against keen river competition and, therefore,
pany in 1899 as a feeder to their railway system.	3′ 3₹″	142	7,11,472	its prospects are not promising.
	a' 6°	151	27,18,000	This line was put forward by the late Indian Midland Railway Company in 1899 as a feeder to their railway system.
See " Mangaldai tramway."	3' 3 <b>1"</b>	59	***	
	•••		<b></b>	See " Mangaldai tramway."

				_
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not	
D.—concld.  Deesa-Tharad railway (Bombay)	Bombay, Baroda and Central India railway (Palanpur-Deesa).	Deesa to Tharad with branches—  (i) Diodar to Radhanpur.	}Surveyed	
		(ii) Abasana to Suigam	Do	$\cdot  $
Degana (or Borawar)-Hissar rail- way (Rajputana and Punjab).			*****	١
Dehra-Mussooree-Landour railway (United Provinces).	Oudh and Rohilkund railway. (Hardwar-Dehra.)	Dehra to Mussobree Mussooree to Landour	Surveyed	1
Dehra Ghazi Khan-Sakhi Sarwar branch (Punjab).	North Western railway	Dehra Ghazi Khan and Sakhi Sarwar.	Do	-
Dhak kranch (Punjab) (New pro- ject).	Ditto	Dhak to the foot of the hills near Katha.	Under survey	
Dhatmapuri-Bangalore railway (Madras and Mysore).	Madras rafiway	Dharmapuri vi <b>4</b> Palakodu to Bangalore with a branch from Palakodu to Krishnagiri.	Surveyed	
Dholka-Dhandhuka-Ranpur extension (Bombay).	Bombay, Baroda and Central Irdia railway (Ahmedabad-Dholka).	Dholka to Dhandhuka viå Fedra Alternative.	Do	
		Dholka to Dhanduka viå Gamph	Do	.
		Ohandhuka to Ranpur	Reconneitred	
Dhulia-Amalnet branch (Dombay).	Great Indian Peninsula	Dhulia and Amainer	Surveyed	
Dindigul-Palghet railway (Madras)	South Indian railway	Dindigul to Palni	Do	
•		Palni to Palghat vid Pollachi and Kollengode.	Do	
Dindigul-Uttamapalaiyam railway (Madras).		•••	******	
Diodar-Radhanpur branch (Bombay).		*****	*****	
Dodbele-Kolar gold-fields railway (Mysore) (New project).	Southern Mahratta railway (Mysore section).	I odbele to the Kolar gold-fields	Not surveyed	•
Dudhwa branch extension to Ramnagar ghat (United Provin- ces).	Rehilkund and Kumaon railway.	Sonaripur and Ramnagar ghat	Surveyed	.,
Dusi-Salur light railway (Madras) F	Bengal-Nagpur railway	Dusi to Salur vid Bobbili with a branch from Paddapenki to Parvatipur.	Not surveyed	
Fatehpur-Markundi chord (United Provinces).	East Indian railway	Fatchpur to Markundi  Alternatives.	Surveyed	.,
		(1) Fatehpur to Karwi	Do.	
G.		(ii) Khaga to Manikpur	Do.	••
Gadag-Yalvigi railway (Bombay)	Southern Mahratta rail-	Gadag to Yalvigi with gold mine branches—	Surveyed	٠,
		(1) Gadag to Kabulayatkatti	Do	••
		(2) Nabapur on (1) to Sangli	Do.	••
		(3) Beldahadi on (1) to Hosur	Do	÷
Gairoula-Chandpur railway (United Provinces).	d Oudh and Rohilkund railway.	Gajroula and Chandpur	l Do	
* 10111100/1	,			,

DIX 38-A.—continued.

corrected up to 31st December 1906.

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	Gauge.	Length.	Estimated cost.	R BMARKS.
		Miller		
	3' <b>3%"</b>	Miles. 84 <sup>.</sup> 84	Rs	This time will be
	3 31	04,04	• 22,71,957	This line will be an extension of the existing Palanpur-Deesa railway.
	3' 38"	16		The results of survey have not yet been received.
	•••	•••		See "Borawar (or Degana)-Hissar railway."
	a' o"	27	3252,895	An alternative to the Dehra-Mussoorce project would be to extend the Hardwar-Dehra railway on the 5' 6' gauge to Raipur or some place at the foot of the hills and to connect Mussoorce by a rope incline.
	5′ 6″	35	35,00,000	
	-1 KH			771111111111111111111111111111111111111
	5′ 6″	10	***	This line has been proposed chiefly in the interests of coal trade.
	2' 6"	92		The surveys have been completed and the results of survey are awaited.
	3' 3 <b>1"</b>	38.64		The surveys have been completed and the results are awaited.
	3' 37"	41.20		
	3′ 3 <del>1</del>	16}	4,62,000	
	5' 6"	20	20,00,000	
(	3' 38"	35.51	33,52,000	
į	5' 6"	35,51	44,47,000	The South Indian railway has been authorized to prepare an estimate
	5' 6 <b>"</b>	77'68	99,02,257	for this line on the 3' 31' gauge.
	•••			See "Remarks" against "Ammayanayakkanur-Uttamapalaiyam railway."
			•••	See "Deesa-Tharad railway," of which this line is proposed to form a branch.
	3′3≹″	80	•••	This line has been urged by the Mysore Durbar in consideration of its administrative advantages and as likely to develop a rich and populous part of the State. The Government of India have approved of a reconnaisance being carried out at the cost of the Mysore Durbar to ascertain its financial prospects.
	3' 3 <del>1</del> "	20'79	4,58,891	This line is intended primarily to serve the Government forests.
	2' 6"	65		This line, which is situated in the Vizagapatam district, was proposed by an English Syndicate who put forward proposals for the construction of certain light railways on the 2'6" gauge in the Ganjam District.
	5' 6"	72.3	98,46,166	- , = Mileg
	5′ 6″	52'0	72,59,200	
	5′ 6″	56.7	85,98,362	
	3' 33"	33'58		This line is intended to form a shall be
	3′31″	13.65	•••	This line is intended to form a chord between the main line and the Harihar branch of the Southern Mahratta railway. Part of it will also supply a branch to the Dhawar goldfald.
	3′3³³′	5'39	•••	supply a branch to the Dharwar goldfields. The surveys have been completed and the results are awaited.
	3′ 31″	2.87	•••	•
	,	}		
	5' 6"	22'15	5,05,953	

#### APPEN

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
G-concld.			
Ganges bridge : at Godag.ri (Eastern Bengal and Assam). or	Eastern Bengal State railway, Katihar Axtension.	Lalgola and Godagari	Surveyed
at Sara (Eastern Bengal and Assam).	Eastern Bengal State railway, Northern sec- tion.	Damukdia and Sara	D <sub>0</sub>
Ganjam District light railways (Madras).			
The lines comprised in this scheme are:—		•	
(i) Berhampur-Gopalpur (Madras).	Bengal-Nagpur railway	Berhampore and Gopalpur	Not surveyed
(ii) Berhampur-Russelkorda (Madras).	Ditto.	Berhampur and Russelkonda	Surveyed
(iii) Chicacole road-Calingapa- tam (Madras).	Ditto.	Chicacole road and Calingapatam	Not surveyed
(iv) Chicacole road-Gunipur (Madras).	Ditto.	Chicacole road and Gunipur	Not surveyed
(v) Chicacole road-Parvatipur	Ditto.	Chicacole road and Parvatipur	Not surveyed
(Madras). (vi) Parlakimedi-Baruva (Madras).	Ditto.	Parlakimedi and Baruva	Not surveyed
Garda (Bahadarpur)-Songhir ex- tension (Bombay).	,	··· •••	*****
iheria extension (Bengal)	Eastern Bengal State railway.	Lalgola and a point on the mouth of the Bhagirathi river near Gheria.	
Goaldndo-Narayanguni extension (Eastern Bengal and Assam).	Eastern Bengal State railway.	Lakhee Khal Hat (opposite Farid- pur) and Munshiganj.	Do
Godagari bridge (Eastern Bengal and Assam).		*****	•••••
Gogra bridge at Chand-deara Ghat (United Provinces).	Bengal and North-West- ern railway.	Chand-deara Ghat and Manjhee Ghat.	Surveyed
Guntur-Repalli branch (Madras)	Southern Mahratta rail- way.	Guntur and Repalli	Surveyed
Gurumaishini-Sini railway (Bengal) H.	Bengal-Nagpur railway	Gurumaishini and Sini	Do
Hajigan]-Shatnal branch (Eastern Bengal and Assam).	Assam-Bengal railway .	Hajiganj and Shatnal	Surveyed
Hansi-Jakhal railway (Punjab) .	Bombay, Baroda and Cen- tral India railway (Rajputana-Malwa).	Hansi and Jakhal	Surveyed
Harda-Hindia railway (Centra Provinces).	Great Indian Peninsula	Harda and Hindia	Not surveyed
Hardoi-Sandi branch (United Provinces).	Oudh and Rohilkhand railway.	Hardoi and Sandi	Surveyed
Harpalpur-Kalpi light railway (United Provinces).	Great Indian Peninsula	Harpalpur and Kalpi	Partly surveyed
	1	1	

## DIX 38-A.—continued.

Gauge.	Length.	Estimated cost.	* REMARKS.
	Miles.	Rs.	•
Undecided (pro- bably mixed 5' 6" and 3' 3\{\}")	•••	1,10,00,000	The Committee appointed by the Government of India to investigate and report on the bridging of the Ganges have, since the close of the year, submitted their report, which is under the consideration of the Government.
Ditto	•••	1,30,00,000	
		•	
2' 6"	8	2,00,000	These lines were put forward by an English syndicate who proposed to take over from the Raja of Parlakimedi the 2' 6' gauge railway
2' 6"	49'08	14,90,711	between that place and Naupada.
a' 5°	24	6,00,000	
2' 6"	65	17,85,000	•
2' 6"	42	10,50,000	
2' 6"	35	8,75,000	
•••			See "Bahadarpur (Ga. da)-Songhir extension".
5′ G*	13'47	9,18,960	The object of the scheme is to provide a ghat station, which can be relied on in the high-water season, on the right bank of the Gange for the Godagari-Lalgola ferry. It has been decided to await the results of working at Lalgola ghat before undertaking the construction of the line.
3′ 38°	40	58,46,738	The project provides for an ordinary transhipment ferry betwee Lakhee Khal Hat and Faridpur, and a wagon and passenger ferr at Munshiganj.
***	***		See "Ganges bridge".
3′ 3∄″	•••	See "Remarks."	The cost of bridge and approaches is Rs. 31,15,511, but including the cost of taising capital and the interest on capital during construction it amounts to Rs. 35,51,682. The project is under revision in accordance with the instructions sent out by the Board of Directors in England.
3′34″	38	<b>1</b> 7,33,68 <b>7</b>	The District Board of Guntur are desirous of constructing this line. The Government of Madras have been asked to report whether ther is any prospect of the District Board being able to raise the necessary capital without State assistance.
5' 6"	44	32,27,438	This line has been projected in connection with Messrs. Tata & Son scheme for iron and steel works near Sini.
3' 3 <b>8"</b>	24'39	32,81,500	This project is for the establishment of a connection between the Assan Bengal and the Eastern Bengal State railways by means of a wage ferry between Shatnal and Narayanganj on the Goalunde Narayanganj extension of the latter line.
3′ 31′′	50'57	20,45,764	This line would connect the Southern Punjab railway at Jakhal with the Raiputana-Malwa railway at Hansi. It may, however, te supersed by the proposed extension of the Patiala-Jakhal railway of Hissar to Narnaul.
			This railway was recommended as a feeder line by the Great India Peninsula railway.
5′ 6″	14:39	3,62,004	
a' 6°	102	15,90,924	Only the Harpalpur-Rath section (25.88 miles) was surveyed by the late Indian Midland railway for a 2'o" gauge line, from the result of which the present estimates have been prepared.  This line will probably be superseded by the Cawnpore-Hamirpu Banda railway with a branch from Maudha 2'd Rath to Harpalpu for which the Government of the United Provinces has expresse a preference.

### APPEN

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
H - concld.			No. (1980)
Harpalpur-Nowgong light ra'lway (United Provinces and Central India).	Great Indian Peninsula Railway.	Harpalpur and Nowgong	Surveyed
Henzada-Pantanaw railway (Burma) (New project).	Burma railways	Henzada and Pantanaw	Reconnoitred
Hsipaw-Mong Nai extension (Burma).	Ditto	Hsipaw to Manpan	Surveyed
Hyderabad-Kistna river railway (Hyderabad, Nizam's).	Nizam's Guaranteed State railway.	Manpan to Mong Nai  Hyderabad and Kistna river	Not surveyed Surveyed
•  Hyderabad (or Kotri)-Karachi railway (Bombay).  I.	•	<b></b>	***
IDAR ROAD.—Brahma Khed extension (Bombay).	Bombay, Baroda and Central India railway (Ahmedabad-Parantij).	Idar Road and Brahma Khed	Surveyed
ITARSI.—Hillichpur railway (Central Provinces).	Great Indian Peninsula railway.	Itarsi and Ellichpur	Not surveyed
ITARSI.—Nagpur railway (Central Provinces).		<b></b>	******
ITARSI.—Wardha railway (Central Provinces).		•••••	******
J. Jalesar Road—Kasganj tramway (United Provinces).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Jalesar Road and Kasganj .	Not surveyed
Jammu Srinagar railway (Kashmir).	North Western railway .	Jammu and Srinagar. The alternative routes are :	
		(i) Larulari-Banihal route .  (ii) Chenab Valley-Banihal	Surveyed .
		route.	
Jamnagar-Salaya extension (Kathiawar, Bombay).	Bhavnagar-Gondal-Juna- gad-Porbandar railway (Rajkot-Jamnagar).	(iii) Golabgarh route .  Jamnagar and Salaya	Do Not surveyed
Jehazpur Nasirabad extension (Rajputana). Jehazpur-Paondero (Rajputana).			•••••
Jhang-Sangla railway (Punjab) .	North Western railway .	Jhang and Sangla	Surveyed
Jullundur Doab group lines (Pun- jab) (New project).	North Western railway.	Hoshiarpur and Nawa Shahr .	Under survey
	}		
		·	
			<u> </u>

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	Gauge.	Length.	Estimated cost.	Remarks.
	- A de la constanta de la cons			
1		Miles.	Rs.	
	2' 6	10.33	2,71,762	This line was surveyed by the late Indian Midland railway on the a'o' gauge, on the results of which the present estimates are based.
	3' 3 <b>1</b> "	53	32,58,228	A detailed survey of this line has been sanctioned since the close of the year.
1	3' 3 <b>† '</b>	50	35,61,178	The Government of Burma consider the Southern Shan States railway to be more urgent than this line.
l	•••		•	may to be there at Bank than this
	3'3}"	See "Remarks"	See "Remarks"	This line has been surveyed by the Nizam's Government, but the results have not yet been received by the Railway Board. It will be about 148 miles in length and will cost Rs. 1,23,68,000 roughly. In conjunction with the Kurnool-Dhone line it will form the southern portion of the through metre gauge connection between Northern and Southern India.
	***	•••		See "Light railways in Sind."
	3′ 31″	33'91	•••	The proposals for the construction of this line by the Ahmedabad-Parantij Railway Company are under consideration. The surveys have been completed arise the results are awaited.
	***	••• 、		This railway was recommended as a feeder line by the Great Indian Peninsula railway. It will be partly superseded by the projected Itarsi-Nagpur railway.
	******		•••••	See " North and South railway ".
	*****	*****	<b>*</b>	See " North and South railway ".
	a' 6*	50	15 to 20 lakhs	The Raja of Awa has applied to the Government of the United Provinces for a concession for this line with permission to utilize the existing road and the canal and road bridges for laying the line on.
٠,	a' 6°	186}	2,38,61,500 2,54,57,500	The connection with Srinagar vid Sarai Kala and Abbottabad which it more feasible has been decided upon, vide "Sarai Kala-Abbottabac Srinagar railway."
	a' 6"	156-17	3,34,73,596	
	3' 3 <b>1'</b> '	\$5	******	This project would probably be undertaken at the expense of the Jam nagar Durbar.
,	******	*****	*****	See "Baran-Marwar railway."
·		*****	******	461
	5' 6"	74.40	36,98,588	This line will be constructed by the State as an integral part of the North Western railway. Complete report is awaited.
# 2	5' 6'	122}	******	The projected railway starts at Hoshiarpur and passes through Adam pur, Juliundur, Kapurthala, Sultanpur, Malsian, Nakodar, Nu Mahal, Rur Kha and Phagwara to Nawa Shahr with branches from Nawa Shahr to Garhehankar on the north and Rahon on the south The following sections of the line were previously surveyed and estimated for:
1				Miles Gauge, Cost.
				Juliundar-Hoshiarpur 23'92 5' 6' 14,10,000   Juliundur-Sultanpur 28'82 2' 6' 10,44,33'

Name of project, and, in brackets, the province in which it is . situated.	Existing railway system with which the project is connected at the mitial point.	Initial and terminal points.	Whether surveyed or not.
•		The second secon	
J.—concld.			
Jullandur-Hoshiarpur railway (Punjab).	,		
Jullundur-Kapurthala-Sultanour railway (Punjab).		·····	
. К.			
Kalnura-Chhatak tramway (Eastern Bengal and Assam).	*****		
Kalikiri Rayachoti branch (Madras).	South Indian railway .	Kolikiri or Piler and Rayachoti .	Surveyed
Kamptee-Deolapar railway (Central Provinces).	Bengal-Nagpur railway .	Kamptee to Deolapar with a branch from Munsar to Ramtek.	Not surveyed
Kangra Valley radway (Punjab) .	North Western railway.	Pathunkot to Palampur with a brunch from Aund to Durera.	Reconnoitred
Karauli branch (Rajputana) .		Gungapur and Karauli	Not surveyed
Karimganj-Chanli Khira tramway (Eastern Bengal and Assam).	******	*****	******
Karnal-Kaithal-Nabha branch (Punjab).	East Indian railway (Delhi-Umballa-Kalka).	Karnal and Nabha	Not surveyed.
Karwi-Rajapur railway (United 1 rovinces).	Great Indian Peninsula railway.	Karwi to Rajapur direct Alternative.	Under survey
		Karwi to Rajapur vid Pahari.	Ditto.
Kathgodam-Nami Tal branch (United Provinces).	Rolulkund and Kumaon railway.	Kathgodam and Naim Tal	Not surveyed
Khamgaon-Jalna railway (Central Provinces and Hyderabad, Nizam's).	Great Indian Peninsula tailway.	Khamgaon and Jalna	Surveyed
Khandwa-Akola-Nanded railway (Central Provinces and Hyder- abad, Nizam's).	Bombay, Biroda and Central India riilway (Rajputan i-Malwa)	Khardwa and Nanded	Surveyed
Khanpur-Chachran radway (Pun- jab).	North Western railway	Khanpur and Chachran	Surveyed
Khijadia-Amreli railway (Kathia- war, Bombay).	Bhavnagar-Gondal-Juna- gad-Porbandar rail- way.	Khijidia and Amreli	Partly surveyed
Kissengunge-Jalpaiguri r.iilway (Eastern Bengal and Assam).	Eastern Bengal State railway.	Kissengurge and Jalpaiguri	Surveyed
Kosamba-Velachha— Zankavao- Vajipur branch (Bombay).	Bombay, Baroda and Central India railway.	Kosamba and Vajipur	Do,
Kotri (or Hyderabad)-Karachi light railway (Bombay).	*****	******	*****
Krishnagar-Jalanghi railway (Bengal).	Eastern Bengal State railway.	Krishnagar and Jalanghi	Surveyed
Kuchaman-Sirsa chord (Rajputana and Punjab).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Kuchaman and Sirsa	Not surveyed

DIX 38-A—continued.

<del></del>			
Gauge.	Length.	Estimated cost.	Remarks.
	Miles.	Rs.	*
	*****	*****	
••••	201199	•	See " Jullundur Donb group lines."
•			
40000	*****	<b>u</b> t	See "Sylhet District tramways."
3′ 38″	34'42	10,75,736	
2' or 2' 6"	34'5	•••••	This line is designed to carry the produce of the manganese mines in the Ramtek area.  The Kamptee-Ramtek railway, which has been sanctioned for construction, supersedes a part of this project.
2' 6"	87	57,85,440	The scheme as originally proposed contemplated a main line from Pathanket via Padampur, Baijnath, Mundi, Suket, Bilaspur, Nalagarh and Rupar to some point on the North Western railway between Ludhiana and Sirhind, with branches to Dalhousie, Dharamsala, Sultanpur, Kalka and Simla.  A concession was, however, granted to a London syndicate for the construction of the section from Pathankot to Palampur with a branch to Dunera. The concession has since lapsed.
Not stated .	25	*****	This branch was proposed by the Karauli Durbar with a view to undertaking earthwork as a measure of famine relief. It will connect Karauli with the Nagda-Muttra railway at Gungapur.
******	*****	••••••	See "Sylhet District tramways."
5′ 6″	70	56,00,000	
5′ 6″	18	•••	
5′ 6″	21		
2'	13	12,00,000	This line was proposed by private enterprise in 1895 and a concession was granted for its construction, which lapsed in 1898.
2′ 6″	93'55	32,65,151	Sold was granted to the same whole in regul
3′ 3¾″	252.25	1,90,00,000	This line will form the northern portion of the through metre gauge connection between railways in Northern and Southern India.
5′ 6*	23°27	*****	The results of survey have not yet been received by the Railway Board. The line will connect with Mithankot by means of a steam ferry be- tween that place and Chachran.
*3' 3 <b>%</b> *	101		This line was proposed by the Baroda Durbar with a view to undertaking earthwork as a measure of famine relief. The Machiala-Amreli Section, about 6 miles, has been surveyed by the Durbar.  The Durbar has since proposed its extension via Chalala and Khamba to Velan Bunder.
3′ຸ3≹″	63.67		The results of survey have not yet been received by the Railway Board.  The line will afford an alternative route, via the Ranaghat-Katihar railway for traffic between Calcutta and Darjeeling.
2' 6"	63.22	*******	The line was surveyed by the Bombay, Baroda and Central India railway in 1900, but no detailed project has yet been submitted.
ínn	*****	•••••	See "Light railways in Sind."
2' 6"	56.10	£4,00,000	The detailed project and estimates for this line have been received, but are held in abeyance pending proposals from the Government of Bengal.
3 3 <b>i"</b>	170	58,31,000	This line will probably be superseded by the Borawar-Hissar railway projected by the Jodhpur and Bikaner Durbars.

#### APPEN

Kunch-Madhogarh railway (United (Madras).  Kunch-Madhogarh railway (United Frovinces).  Kunch-Madhogarh railway (United Frovinces).  Kunch-Madhogarh railway (United Frovinces).  Kurla-Trombay railway (Bombay)  Kurla-Trombay railway (Bombay)  Great Indian Peninsula (Indian noposide Auriya with a branch (Bombay).  Lath (or Belapur)-Sangamner Larkhan from Jalaon to Madhogarh.  Kutwa-Ahmadpur railway (Bengal)  Larkhan-Kanha-Shahdadpur railway.  Lalahi (or Belapur)-Sangamner Larkhan and Ahmadpur				
Kunch-Madhogarh railway (United Peninsula railway (Great Indian Indian Peninsula railway (Great Indian Peninsula railway (Grea	the province in which it is	with which the project is connected at the	•	Whether surveyed or not.
Kumbakonam-Mannargudi branch (Madras).  Kunch-Madhogarh railway (United Provinces).  Kura-Trombay railway (Bombay).  Lakh (or Belapur)-Sangamner branch (Bombay).  Lakh (or Belapur)-Sangamner branch (Bombay).  Lakho-Kunlong extension (Bengal)  Lakho-Kunlong extension (Burma)  Burma railways  Lashio-Kunlong extension (Burma)  Light railways in Sind (Bombay).  The lines comprised in the scheme are:—  (1) Mirpur Khas-Jhudo (Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (2) Mirpur Khas-Sangur  (3) Shadipalli-Sanara with a possible extension thereof to meet (S).  (3) Chhor-Tatta  (4) Shadipalli-Sanara with a possible extension thereof to meet (S).  (5) Chhor-Tatta  (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (9) Mirpur Buttora-Dhindee  (10) Badin-Jungshahi  North Western railway.  Badin and Jungshahi  North Western railway.  Badin and Jungshahi  Tando Muhammed Khan and Do.	K-meaneld		and the second s	
Kunch-Madhogarh railway (United Provinces).  Kurla-Trombay railway (Bombay)  Kurla-Trombay railway (Bombay)  Lakh (or Belapur) Sangamner branch (Bombay)  Lagkh (or Belapur) Sangamner branch (Bombay)  Lagkh (or Belapur) Sangamner branch (Bombay)  Lagkh (or Belapur) Sangamner branch (Bombay)  Lagkh (or Belapur) Sangamner branch (Bombay)  Lagkh (or Belapur) Sangamner branch (Bombay)  Laghoda-Gheria setension (Bengal)  Larkhana-Kambar-Shahdadpur railway (Bombay)  Lashio-Kunlong extension (Burma)  Burma railways  Laskio to the Kunlong ferry.  The alternative routes are:— (1) Mirpur Khas-Sangur  (2) Hisupkyet (Supkyet)  (3) Shadipalli-Mehoo Suboo  (4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta  (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad (or Kori)-Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (9) Mirpur Buttora-Dhindee  (19) Bedin-Jungshahi  North Western railway.  Sarveyed  Laskio to the Kunlong ferry.  The alternative routes are:— (1) Hisney (Theinni) (2) Hsupkyet (Supkyet)  Reconnoitred  Mirpur Khas and Jhudo  Mirpur Khas and Sangur  Not surveyed  Surveyed   Not surveyed  Not surveyed  Surveyed   Not surveyed  Not surveyed  Not surveyed  Not surveyed  Not surveyed  13) Jedeband (or Kotri)- sid Tatta  Not surveyed  14) Jedeband (or Kotri) sid Tatta  Not surveyed  15) Jedeband (or Kotri)- sid Tatta  Not surveyed  15) Jedeband (or Kotri)- sid Tatta  Not surveyed  16) Mirpur Buttera on (5) to Dhindee  17) Bedin-Jungshahi  North Western railway  Badin and Jungshahi  Surveyed  Surveyed  Surveyed  Not surveyed  17) Jedeband (or Kotri) sid Tatta  Not surveyed  18) Jedeband (or Kotri) sid Tatta  Not surveyed  19) Jedeband (or Kotri) sid Tatta  Not surveyed  19) Jedeband (or Kotri) sid Tatta  Not surveyed  19) Jedeband (or Kotri) sid Tatta  Not surveyed	Kumbakonam-Mannargudi branch	South Indian railway	Kumbakonam and Mannargudi	Surveyed
Provinces	•	Í	•	
Provinces		•		
Provinces		C . I II . Dulant		
Tailway.  Lakh (or Belapur)-Sangamner branch (Bombay).  Lalgola-Gheria extension (Bengal) Larkhana-Kambar-Shahdadpur railway (Bombay).  Lashio-Kunlong extension (Burma)  Burma railways  North Western railway Lashio-Kunlong extension (Burma)  Burma railways  Lashio to the Kunlong ferry.  The alternative routes are:—  (1) Mirpur Khas-Jangur  (2) Hsupkyet (Supkyet)  Reconnoitred  (3) Shadipalli-Mehoo Suboo  (4) Shadipalli-Sanara with a possible extension thereof to meet (5).  (5) Chhor-Tatta  (6) Mirpur Bitora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Karachi.  (9) Belo-Shahbunder  (10) Badin-Jungshahi  North Western railway (Jodhpur-Bikaner railway (Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  Lower Sind branches (Bombay) —  The lines at present comprised in the scheme are:—  (1) Badin-Jungshahi  North Western railway  Badin and Jungshahi  Surveyed  Larkhana and Ahmadpur  Larkhana and Shahdadpur  Larkhana and Shahdadpur  Surveyed  Surveyed  Withur and Ahmadpur  Larkhana and Shahdadpur  Surveyed  Surveyed  Mirpur Khas and Jhudo  Mirpur Khas and Sangur  Not surveyed  Not surveyed  Surveyed  Not surveyed  Not surveyed  Chor and Tatta  Not surveyed  Not surveyed  Hyderabad (or Kotri) sid Tatta to Karachi.  Tatta to Karachi  Not surveyed  Not surveyed  Not surveyed		railway.	Jumna opposite Auriya with a branch from Jalaon to Madho-	Surveyed
Lakh (or Belapur)-Sangamner branch (Bombay).  Lalgola-Gheria extension (Bengal)  Larkhana-Kambar-Shahdadpur railway (Bombay).  Lashio-Kunlong extension (Burma)  Burma railways  Lashio to the Kunlong ferry.  Lashio to the Kunlong ferry.  The alternative routes are:—  (i) Hsenwi (Theinni)  (2) Hsupkyet (Supkyet)  Reconnoitred  (3) Shadipalli-Mehoo Suboo  (4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta  (6) Mirpur Buttora-Dhindec  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Karachi  (9) Mirpur Buttora-Dhindec  (10) Belo-Shahbunder  (11) Mirpur Buttora-Dhindec  (12) Hyderabad (or Kotri)-Karachi  (2) Tatate-Karachi  (3) Tatate-Karachi  Lower Sind branches (Bombay) —  The lines at present comprised in the scheme are !—  (1) Badin-Jungshahi  North Western railway.  (3) Tando Muhammed Khan  North Western railway.  (3) Tando Muhammed Khan  (4) Tando Muhammed Khan  Do.  Tando Muhammed Khan and  Tando Muhammed Khan  Tando Muhammed Khan  Tando Muhammed Khan  Tando Muhammed Khan	Kurla-Trombay railway (Bombay)		Kurla and Trombay	Surveyed
Lakh (or Belapur)-Sangamner branch (Bombay).  Lagola-Gheria extension (Bengal)  Larkhana-Kambar-Shahdadpur railway (Bombay).  Lashio-Kunlong extension (Burma)  Lashio-Kunlong extension (Burma)  Burma railways  Lashio to the Kunlong ferry.  The alternative routes are:—  (i) Hsenwi (Theinni)  (2) Hsupkyet (Supkyet)  Reconnoitred  Reconnoitred  Reconnoitred  Indhpur-Bikaner railway (Jodhpur-Hyderabad).  (3) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta  (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Karachi  (9) Bride Shahbunder  (10) Badin-Jungshahi  North Western railway  Mirpur Khas and Jhudo  Mirpur Khas and Jhudo  Mirpur Khas and Sangur  Mirpur Khas and Sangur  Mirpur Khas and Sangur  Not surveyed  Not surveyed  Shadipalli vid Samara to a point on (5).  Chor and Tatta  Mirpur Buttora on (5) to Dhindee  Mirpur Buttora on (5) to Dhindee  Mirpur Buttora on (5) to Dhindee  Mirpur Buttora on (5) to Dhindee  Mirpur Buttora on (5) to Dhindee  Mirpur Buttora on (5) to Tatta  Mot surveyed  Not surveyed  Not surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Tatta to Karachi  Not surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed	Kutwa-Ahmadpur railway (Bengal)	East Indian railway.	Kutwa and Ahmadpur	Surveyed ,
Lakh (or Belapur)-Sangamner branch (Bombay).  Lagola-Gheria extension (Bengal)  Larkhana-Kambar-Shahdadpur railway (Bombay).  Lashio-Kunlong extension (Burma)  Lashio-Kunlong extension (Burma)  Burma railways  Lashio to the Kunlong ferry.  The alternative routes are:—  (i) Hsenwi (Theinni)  (2) Hsupkyet (Supkyet)  Reconnoitred  Reconnoitred  Reconnoitred  Indhpur-Bikaner railway (Jodhpur-Hyderabad).  (3) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta  (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Karachi  (9) Bride Shahbunder  (10) Badin-Jungshahi  North Western railway  Mirpur Khas and Jhudo  Mirpur Khas and Jhudo  Mirpur Khas and Sangur  Mirpur Khas and Sangur  Mirpur Khas and Sangur  Not surveyed  Not surveyed  Shadipalli vid Samara to a point on (5).  Chor and Tatta  Mirpur Buttora on (5) to Dhindee  Mirpur Buttora on (5) to Dhindee  Mirpur Buttora on (5) to Dhindee  Mirpur Buttora on (5) to Dhindee  Mirpur Buttora on (5) to Dhindee  Mirpur Buttora on (5) to Tatta  Mot surveyed  Not surveyed  Not surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Tatta to Karachi  Not surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed  Surveyed	1	e	ı	
branch (Bombay). Laglola-Gheria extension (Bengal) Larkhana-Kambar-Shahdadpur razilway (Bombay). Lashio-Kunlong extension (Burma)  Light railways in Sind (Bombay)— The lines comprised in the scheme are:— (1) Mirpur Khas-Jhudo (2) Mirpur Khas-Sangur Jodhpur-Bikaner railway (Jodhpur-Hyderabad). (3) Shadipalli-Mehoo Suboo (4) Shadipalli-Samara with a possible extension thereof to meet (5). (5) Chhor-Tatta (7) Belo-Shahbunder (8) Hyderabad (or Kotri)-Karchi. (9) Tatta-Karachi (1) Badin-Jungshahi (2) Tando Muhammed Khan (3) Tando Muhammed Khan (4) Don Mirpur Buthora Comprised in the scheme are:— (1) Mirpur Khas and Shahdadpur (2) Hsupkyet (Supkyet) (2) Hsupkyet (Supkyet) (2) Hsupkyet (Supkyet) (2) Hsupkyet (Supkyet) (2) Hsupkyet (Supkyet) (3) Shadipalli-Samara with a possible extension thereof to meet (5). (3) Shadipalli-Samara with a possible extension thereof to meet (5). (4) Shadipalli-Samara with a possible extension thereof to meet (5). (5) Chhor-Tatta (6) Mirpur Buttora-Dhindee (7) Beto-Shahbunder (8) Hyderabad (or Kotri)-Karachi (9) Beto-Shahbunder (10) Badin-Jungshahi (11) Badin-Jungshahi (12) Tando Muhammed Khan and Do.			•••	
Larkhana-Kambar-Shahdadpur railway (Bombay).  Lashio-Kunlong extension (Burma)  Burma railways  Burma railways  Lashio to the Kunlong ferry.  The alternative routes are:— (i) Hsenwi (Theinni) (2) Hsupkyet (Supkyet)  Reconnoitred .				
Lashio-Kunlong extension (Burma)  Burma railways  Lashio to the Kunlong ferry.  The alternative routes are:—  (1) Hsenwi (Theinni) (2) Hsupkyet (Supkyet)  Reconnoitred  Reconno	-		*****	******
The lines comprised in the scheme are:—  (1) Mirpur Khas-Jando  (2) Mirpur Khas-Sangur  (3) Shadipalli-Mehoo Suboo  (4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta  (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad  (9) Hyderabad  (10) Mirpur Buttora-Dhindee  (11) Hsenwi (Theinni)  (2) Hsupkyet (Supkyet)  (3) Hsupkyet (Supkyet)  (4) Mirpur Khas and Jhudo  (5) Shadipalli-Mehoo Suboo  (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad  (9) Hyderabad  (10) Mirpur Buttora-Dhindee  (11) Hsenwi (Theinni)  (2) Hsupkyet (Supkyet)  Mirpur Khas and Jhudo  (12) Mirpur Khas and Sangur  (13) Shadipalli and Mehoo Suboo  (14) Shadipalli-Samara with a possible extension thereof to meet (5).  (15) Chhor-Tatta  (16) Mirpur Buttora-Dhindee  (17) Belo-Shahbunder  (18) Hyderabad  (19) Mirpur Khas and Jhudo  (20) Mirpur Khas and Sangur  (21) Shadipalli and Mehoo Suboo  (22) Mirpur Buttora on (23) Shadipalli wid Samara to a point on (23).  (23) Mirpur Buttora on (23) to Dhindee  (24) Belo-Shahbunder  (25) Hyderabad  (26) Mirpur Buttora on (25) to Dhindee  (27) Belo-Shahbunder  (28) Hsupkyet (Supkyet)  (29) Hsupkyet (Supkyet)  (20) Hsupkyet (Supkyet)  (20) Hsupkyet (Supkyet)  (21) Hsupkyet (Supkyet)  (22) Hsupkyet (Supkyet)  (23) Hsupkyet (Supkyet)  (24) Hsupkyet (Supkyet)  (25) Hsupkyet (Supkyet)  (26) Hsupkyet (Supkyet)  (27) Hsupkyet (Supkyet)  (28) Hsupkyet (Supkyet)  (29) Hsupkyet (Supkyet)  (20) Hsupkyet (Supkyet)  (20) Hsupkyet (Supkyet)  (20) Hsupkyet (Supkyet)  (21) Hsupkyet (Supkyet)  (22) Hsupkyet (Supkyet)  (23) Hsupkyet (Supkyet)  (34) Hsupkyet (Supkyet)  (35) Hsupkyet (Supkyet)  (46) Hsupkyet (Supkyet)  (58) Hyderabad  (49) Shadipalli-Mehoo Suboo  (50) Mirpur Buttora on (5) to Dhindee  (51) Belo-Shahbunder  (52) Hsupkyet (Supkyet)  (53) Hotalization on (5) to Dhindee  (54) Belo on (5) to Dhindee  (55) Hyderabad  (66) Mir		North Western railway	Larkhana and Shahdadpur	Surveyed
Light railways in Sind (Bombay)—  The lines comprised in the scheme are:—  (1) Mirpur Khas-Jhudo  (2) Hsupkyet (Supkyet)  Mirpur Khas and Jhudo  (3) Mirpur Khas-Sangur  Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (4) Shadipalli-Mehoo Suboo  (4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta  (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Karachi.  (9) Hyderabad (or Kotri)-Karachi.  (1) Hsenwi (Theinni)  (2) Hsupkyet (Supkyet)  Mirpur Khas and Jhudo  Mirpur Khas and Jhudo  Shadipalli and Mehoo Suboo  Shadipalli and Mehoo Suboo  (3) Shadipalli-Samara with a possible extension thereof to meet (5).  (4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta  Jodhpur-Bikaner railway (Jodhpur-Hyderabad).   Mirpur Buttora on (5) to Dhindee  Belo on (5) to Shahbunder  Myderabad (or Kotri)-Karachi.  Tatta to Karachi  Lower Sind branches (Bombay)—  The lines at present comprised in the scheme are:—  (1) Badin-Jungshahi  North Western railway  North Western railway  Tando Muhammed Khan and Do.	Lashio-Kunlong extension (Burma)	Burma railways	Lashio to the Kunlong ferry.	
Light railways in Sind (Bombay)—  The lines comprised in the scheme are:—  (1) Mirpur Khas-Jhudo Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (2) Mirpur Khas-Sangur Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (3) Shadipalli-Mehoo Suboo Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (6) Mirpur Buttora-Dhindee (7) Belo-Shahbunder Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (7) Belo-Shahbunder Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (8) Hyderabad (or Kotri)-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (9) Hyderabad (or Kotri)-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (1) Badin-Jungshahi North Westernrailway Badin and Jungshahi Surveyed Surveyed Surveyed Surveyed			The alternative routes are:-	
Light railways in Sind (Bombay)—  The lines comprised in the scheme are:—  (1) Mirpur Khas-Jhudo Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (2) Mirpur Khas-Sangur Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (3) Shadipalli-Mehoo Suboo Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (6) Mirpur Buttora-Dhindee (7) Belo-Shahbunder Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (7) Belo-Shahbunder Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (8) Hyderabad (or Kotri)-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (9) Tatta-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (10) Badin-Jungshahi North Westernrailway Badin and Jungshahi Surveyed Surveyed			(I) Hsenwi (Theinni)	Reconnoitred ,
The lines comprised in the scheme are:—  (1) Mirpur Khas-Jhudo  (2) Mirpur Khas-Sangur  (3) Shadipalli-Mehoo Suboo  (4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta  (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Karachi  or Tatta-Karachi  or Tatta-Karachi  or Tatta-Karachi  Lower Sind branches (Bombay) —  The lines at present comprised in the scheme are:—  (1) Badin-Jungshahi   (2) Mirpur Khas and Jhudo  Mirpur Khas and Jhudo  Mirpur Khas and Jhudo  Mirpur Khas and Jhudo  Mirpur Khas and Jhudo  Mirpur Khas and Jhudo  Mirpur Khas and Jhudo  Not surveyed  Shadipalli and Mehoo Suboo  (Shadipalli vid Samara to a point on (5).  Chhor and Tatta  Mirpur Buttora on (5) to Dhindee Belo on (5) to Dhindee Belo on (5) to Shahbunder  Hyderabad (or Kotri)-Karachi  Tatta to Karachi  Tatta to Karachi  Not surveyed  Not surveyed  Tatta to Karachi  Not surveyed  Surveyed  Surveyed  Tando Muhammed Khan and Do.			(2) Hsupkyet (Supkyet)	Reconnoitred
scheme are:—  (1) Mirpur Khas-Jhudo  (2) Mirpur Khas-Sangur  (3) Shadipalli-Mehoo Suboo  (4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Karachi.  (9) Hyderabad (or Tatta-Karachi  (1) Badin-Jungshahi  (1) Mirpur Khas and Jhudo  (2) Mirpur Khas and Sangur  (3) Mirpur Khas and Sangur  (4) Shadipalli-Mehoo Suboo  (5) Chhor-Bikaner railway (Jodhpur-Hyderabad).  (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Karachi  (9) Tando Muhammed Khan-  (10) Dodhpur-Bikaner railway (Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (11) Badin-Jungshahi  (12) Tando Muhammed Khan-  (13) Tando Muhammed Khan-  (14) Mirpur Khas and Jhudo  Mirpur Khas and Jhudo  Not surveyed  Not surveyed  Not surveyed  Not surveyed  Not surveyed  Not surveyed  Not surveyed  Surveyed  Tatta to Karachi  Not surveyed  Surveyed  Tando Muhammed Khan and Do.	Light railways in Sind (Bombay)-			
(2) Mirpur Khas-Sangur Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (3) Shadipalli-Mchoo Suboo Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (6) Mirpur Buttora-Dhindee (7) Belo-Shahbunder (8) Hyderabad (or Kotri)-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (8) Hyderabad (or Kotri)-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (8) Hyderabad (or Kotri)-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (9) Hyderabad (or Kotri)-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (1) Badin-Jungshahi North Western railway Shadipalli and Mehoo Suboo Not surveyed No				
(3) Shadipalli-Mehoo Suboo  (4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta  (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Karachi  or Tatta-Karachi  or Tatta-Karachi  or Tatta-Karachi  or Tatta-Karachi  In the scheme are:—  (1) Badin-Jungshahi   (3) Shadipalli and Mehoo Suboo   Not surveyed   In the scheme are in the scheme	(1) Mirpur Khas-Jhudo		Mirpur Khas and Jhudo	Not surveyed
(4) Shadipalli-Samara with a possible extension thereof to meet (5).  (5) Chhor-Tatta Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (6) Mirpur Buttora-Dhindee (7) Belo-Shahbunder Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (8) Hyderabad (or Kotri)-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (9) Tatta-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (1) Badin-Jungshahi North Western railway Badin and Jungshahi Surveyed Surveyed Surveyed Tando Muhammed Khan and Do.	(2) Mirpur Khas-Sangur		Mirpur Khas and Sangur	Not surveyed
possible extension thereof to meet (5).  (5) Chhor-Tatta Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (6) Mirpur Buttora-Dhindee (7) Belo-Shahbunder Jodhpur-Bikaner railway (Belo on (5) to Dhindee Belo on (5) to Shahbunder Not surveyed Hyderabad (or Kotri) for Tatta-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (7) Tatta-Karachi Jodhpur-Bikaner railway (Jodhpur-Hyderabad).  (8) Hyderabad (or Kotri) for Shahbunder Not surveyed Not surveyed Not surveyed Not surveyed Not surveyed Not surveyed	(3) Shadipalli-Mehoo Suboo	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Shadipalli and Mehoo Suboo	Not surveyed
* (6) Mirpur Buttora-Dhindee  (7) Belo-Shahbunder  (8) Hyderabad (or Kotri)- Karachi.  * Tatta-Karachi  Lower Sind branches (Bombay) —  The lines at present comprised in the scheme are:—  (1) Badin-Jungshahi  North Western railway  (2) Tando Muhammed Khan-  Do.  Mirpur Buttora on (5) to Dhindee Belo on (5) to Shahbunder  Hyderabad (or Kotri) via Tatta to Karachi  Tatta to Karachi  Not surveyed  Surveyed  Surveyed  Tatta to Karachi  Not surveyed  Tatta to Karachi  Tatta	possible extension thereof			Not surveyed
(7) Belo-Shahbunder  (8) Hyderabad (or Kotri)-Karachi.  or Tatta-Karachi  Lower Sind branches (Bombay) —  The lines at present comprised in the scheme are:—  (1) Badin-Jungshahi  North Western railway  Belo on (5) to Shahbunder  Hyderabad (or Kotri) via Tatta to Karachi  Tatta to Karachi  Not surveyed  Not surveyed  Surveyed  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Not surveyed  Not surveyed  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Not surveyed  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Not surveyed  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Tatta to Karachi  Not surveyed	(5) Chhor-Tatta	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Chhor and Tatta	Not surveyed
(8) Hyderabad (or Kotri)- Ksrachi.  For Tatta-Karachi  Lower Sind branches (Bombay) —  The lines at present comprised in the scheme are:—  (1) Badin-Jungshahi  North Western railway  North Western railway  Padin and Jungshahi  Tatta to Karachi  Not surveyed  Not surveyed  Tatta to Karachi  Tat	* (6) Mirpur Buttora-Dhindee		Mirpur Buttora on (5) to Dhindee	Not surveyed
Ksrachi.  or Tatta-Karachi  Lower Sind branches (Bombay) —  The lines at present comprised in the scheme are:—  (1) Badin-Jungshahi  North Western railway  Do.  Tando Muhammed Khan and Do.	(7) Belo-Shahbunder	,••	Belo on (5) to Shahbunder	Not surveyed
Lower Sind branches (Bombay)—  The lines at present comprised in the scheme are:—  (1) Badin-Jungshahi North Western railway Badin and Jungshahi Surveyed  (2) Tando Muhammed Khan-  Do. Tando Muhammed Khan and Do.				Not surveyed
The lines at present comprised in the scheme are:—  (1) Badin-Jungshahi North Western railway Badin and Jungshahi Surveyed  (2) Tando Muhammed Khan Do. Tando Muhammed Khan and Do.	or Tatta-Karachi	*****	Tatta to Karachi	Not surveyed
the scheme are:—  (1) Badin-Jungshahi North Western railway Badin and Jungshahi Surveyed  (2) Tando Muhammed Khan- Do. Tando Muhammed Khan and Do.	Lower Sind branches (Bombay) -			-
(a) Tando Muhammed Khan Do. Tando Muhammed Khan and Do.				
	(1) Badin-Jungshahi	North Western railway	Badin and Jungshahi	Surveyed
Mirpur Buttora.		Do.		Do

DIX 38-A-continued.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
3' 31''	22'57	•	The results of survey have not yet been received by the Railway Board. The Government of Madras consider this line to be more important than the Nidamangalam-Vedataniem railway proposed by the District Board of Tanjore. The South Indian railway are, however, opposed to its construction except as an integral part of their undertaking on the ground of its being competitive.  Proposals for financing the line are awaited from the Government of Madras.
5' 6"	52	•	A certain amount of earthwork has been carried out by the United Provinces Government as a measure of famine relief. The survey habeen completed, but the results have not yet been received.
5' 6"	5°4 <b>5</b>		The survey has been completed and the results are awaited.
5' 6"	314	28,22,765	The line will probably be constructed by the East Indian railway a part of their undertaking, and the point of junction with the loop lin will probably be at Sainthia instead of at Ahmadpur.
*****			See "Belapur (or Lakh)—Sangamner branch."
			See "Gheria extension."
2' 6"	33.3	11,68,118	On the 5'6" gauge the cost is estimated at Rs. 19,31,676 and for a light line Rs. 13,07,000.
3' 3%"	90	1,01,41,298	The Theinni route is considered in every way inferior to the Supky
3′ 3³**	931	1,03,54,840	Toute.
3′ 38″	46		A Karachi firm has applied for permission to form a company England with a capital of £250,000 for financing these lines. It
	401200	••••••	proposed to take the Mirpur Khas Jhudo line in haid at first at to raise £55,000 for its construction. The concessions asked for a a rebate from the traffic interchanged with the Jodhpur Bikaner raway, which will construct and work the line, towards a dividend
******	•••••		3½ per cent., and others usually granted to Branch line companie The application is under consideration.
*****	*****	•••••	,
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₩	401	••••	
		<b>*</b> e.	*
5′ 6"	70	37,41,833	These lines, as well as the Hyderabad-Badin branch, which is now ope were projected as light feeders to the North Western railway in to country lying between the Indus river and the Runn of Cutch. T
5′ 6″	33	17,19,269	Chhor-Tatta and the Mirpur Buttora-Dhindee lines proposed und the Sind Light railways scheme partially cover the alignment of the branches.

		C	
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
M. Mandra-Basal railway (Punjab)	North Western failway	Mandra to Basal viá Chakwal, Bhon and Pindi Gheb.	Not surveyed
Mangaldai tramway (Eastern Bengal and Assam).	***************************************	Rangamatighat to Ghagrapara	Reconnoitred by the promoters.
Margao-Korwar railway (Bombay and Portuguese territory.)	Southern Mahratta rail- way. (West of India Portu- guese.)	Margao to Sadasivgarh ferry, opposite Karwar.	Reconnoitred
Mauli-Nathdwara branch (Rajpatana).	Udaipur-Chitor railway	Mauli and Nathdwara	Surveyed
Miraj-Bijapur branch (Bombay) .	Southern Mahratta rail- way.	Miraj and Bijapur	Not surveyed
Mirpur Buttora-Dhindee light railway (Bombay).			
Mirpur Khas-Jhudo light railway (Bombay).	<b>,</b> .	*****	
Mirpur Khas-Sangur light railway (Bombay).	}		
Mirzapur-Maihar Chord (United Provinces and Central India).	East Indian railway .	Mirzapur and Maihar	Reconnoitred
Miyagam-Sinor branch (Bombay)	Bombay, Baroda and Cen- tral India railway.	Miyagam and Sinor	Surveyed
Moulmein-Myawaddy railway (Burma).	Burma railways	Moulmein and Myawaddy	Reconnaissance sanctioned
Moulmein-Ye railway (Burma) .	Ditto	Moulmein and Ye	Surveyed
Munsar-Ramtek branch (Central Provinces).	41.188	•••••	•••••
Murshidabad-Azimganj link (Bengal).	Eastern Bengal State	Murshidabad and Azimganj .	Surveyed
Murtajapur Pisgaon railway (Central Provinces).	Great Indian Peninsula railway.	Murtajapur and Pisgaon	Surveyed
Muttra-Aligarh railway (United Provinces).	tral India railway.	Muttra and Aligarh The alternative projects are:	
	(Rajputana-Malwa).	(1) Muttra vid Brindaban with a new bridge near that place over the Jumna and thence direct to Aligarh.	
•		(2) Muttra avoiding Brindaban and utilising the existing bridge over the Jumna at Muttra and thence direct to Aligarh.	
Muttra-Hathras link (United Provinges (New project).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Multra and Hathras	See "remarks" .* .
Muzaffarpur-Mohammadpur chord (Bengal).	Bengal and North-West- ern railway. (Tirhoot section).	Muzaffarpur and Mohammadpur.	Under survey
Muzastarpur—Sitamarhi chord (Bengal).	Do.	Muzaffarpur and Sitamarhi	Do.
Myingyan-Natogyi light railway . (Burma) (New project).	Burma railways	Myingyan and Natogyi	Survey sanctioned .
			S'

DIX 38-A-continued.

{ <del></del>	1	1	7
' Gange.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
2' 6"	100		This line has been recommended for construction by the Government of the Punjab to open up the country north of the Salt Range. The Railway Board have, since the close of the year, sanctioned its survey by the agency of the North Western railway.
a' 6"	35	7,00,000	This line was proposed by private enterprise, but the project fell through owing to the inability of the Local Administration to offer the guarantee asked for.
Not stated apparently.	361	28,00,000 🦼	This line has been proposed to open up communication with Karwar, which is practically cut off from all intercourse with the outer world during the south-west monsoon when the coasting steamers cease running. About 30 miles of the line will be situated in Portuguese territory and the remainder in British territory.
3′ 3ਵੈ*	14'75	4,72,698	This line will be constructed by the Mewar Durbar who proposed it.
*****	77	•••••	The Barsi Light Railway Company contemplate the construction of this line as an extension of their 2' 6" gauge railway.
	*** . **	100 508	See under " Light railways in Sind."
5' 6"	140	1,55,00,000	This line was proposed by the East Indian railway. It is not considered to be of sufficient importance at present to require investigation.
a¹ 6"	20	5,76,032	The line has been proposed by the Baroda Durbar in whose territory it will entirely lie.
3′ 3∄″	80	900100 ·	-
Do.	94'06	90,00,000	Preliminary report received. Detailed project and estimates are awaited.
•••••	*****	*****	See under " Kamptee-Deolapar railway."
5′ 6″	5'82	18,05,616	The project consists practically of a bridge over the Bhagirathi river below Azimganj and its approaches. It has since been abandoned.
a' 6"	131'42	56,03,381	The results of survey have been received since the close of the year.
5′ 6″	<b>4</b> 0·80	40,54,603	The question of agency for the construction and working of this line has not yet been decided, and no decision on this point is likely to be arrived at till the Nagda-Muttra railway has been opened and its effect on trade observed.
Do.	38.52	33,53,688	4
See "remarks."	-90	•••	Sanction has been accorded to the preparation of plans and estimates for this line on the 5' 6' gauge.
3′3 ≇″	31		
Do.	. 34	944 	
Not stated.	. 19	•••	-
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### APPEN

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
M—concld.  Mymensingh-Netrokona exten-	,		
sion (Eastern Bengal and Assam.)		•	***
Mysore-Tellicherry railway (Mysore and Madras).	Southern Mahratta rail- way (Mysore section),	Mysore and Tellicherry	Surveyed.
N.			
Nadiad-Kapadvanj brachh (Bombay).	Bombay, Baroda and Central India railway.	Nadiad and Kapadvanj	Not surveyed
Nagpur-Barosa branch (Central Provinces).	Bengal-Nagpur railway	Nagpur and Barosa	See remarks
Nagpur-Chhindwara railway (Central Provinces).	Do	Nagpur and Chhindwara	Not surveyed
Nanjangud-Erode railway (Mysore and Madras).	Southern Mahratta railway (Mysore section).	Nanjangud and Erode	Surveyed
Nar-Nadiad loop (Bombay)	Bombay, Baroda and Central India railway (Petlad-Cambay).	Nar and Nadiad	Surveyed
Nattore-Rampur Boalia branch (Eastern Bengal and Assam).	Eastern Bengal State	Nattore and Rampur Boalia	Surveyed
Nawadah-Madhupur (or Baidya- nath)-Nalhati (Bengal).	East Indian railway	Nawadah and Nalhati	Not surveyed
Nerbudda Valley light railway (Central India).	<b>391</b> 145	•••••	111000
Netrokona-Langar Bazar extension (Eastern Bengal and Assam).	******	*****	*** <b>***</b>
Nidamangalam-Vedaraniem rail- way (Madras).	South Indian railway	Nidamangalam and Vedaraniem	Partly surveyed
NORTH AND SOUTH RAILWAY (CENTRAL PROVINCES, NIZAM'S HYDERABAD AND MADRAS.)			
The lines connected with the north- ern portion of the scheme are:—			
(i) Itarsi-Wardha (Central Provinces).	Great Indian Peninsula	Itarsi and Wardha	Surveyed
(ii) Itarsi-Nagpuç:—			, i
Eastern alignment—Itarsi, passing near Chhindwara town and the Pench Valley colliery, to Nagpur (Central Provinces).	Ditto	Itarsi and Nagpur	Ditto "
Western alignment—Itarsi, via Pandharna and Multai to Nagpur (Central Pro-	Ditto	Ditto	Ditto ,

### DIX 38-A-contd.

Gauge.	Length.	Estimated cost.	Remarks.
	Miles,	Rs.	
•••	•••	***	See under "Dacca-Mymensingh railway extensions".
2' 6"	144'69	81,00,000	The principal objects of this line are to open up parts of the Mysore plateau and the Malabar district and to give the coffee and other products of Coorg access to Mysore and to the scaport of Tellicherry.
5′ 6*	28	9,73,360	The District Board of Kaira have under consideration the question of financing this line.
2' 6"	47'04	<b>23,34,14</b> 5	The detailed project is based on the surveys carried out by the Great Indian Peninsula railway on 5' 6' gauge in connection with the Nagpur-Itarsi line. This project covers part of the proposed Nagpur-Chhindwara railway.
2' 6"	80		The early construction of this line was urged by the Hon'ble the Chief Commissioner, Central Provinces, in order to develope trade in manganese ore and to enable Nagpur to obtain cheap coal for its mills, etc., from the Pench Valley deposits.
3' 3%"	120'70	1,23,03.700	This line will link up the Southern Mahratta and the South Indian railway systems. A length of 33'70 miles, which lies in Mysore territory and is estimated to cost Rs. 20,81,764, has been sanctioned for construction by, and at the cost of, the Mysore State, but the Durbardo not propose to construct this section until the British section is put in hand.
5' 6"	20'25	11,56,713	This line was proposed by the Baroda Durbar in whose territory it will mostly lie. The Durbar has since expressed a desire to construct it on the 2'6" gauge instead of on the 5'6" gauge and had the Nar-Piej section, 17 miles, surveyed on the 2'6" gauge by the agency of the Bombay, Baroda and Central India railway.
3′ 38″	24.43	11,14,875	This line has been deferred pending the investigation of the crossing sof the Ganges at some point between Sara and Godagari.
*	***		This line will probably be constructed by the East Indian railway.
•••	•••		See "Barwaha-Bodeli light railway."
*****	*****	.,	See under "Dacca-Mymensingh railway extensions."
3' 3 <b>1</b> "	•••		This line comprises the Nidamangalam—Mannargudi section of the Kumbakonam-Mannargudi line. It has been proposed by the District Board of Tanjore who urge the construction of the Tirutaraipundi-Vedaraniem section of it in preference to the Kumbakonam-Mannargudi line which the Madras Government consider to be of primary importance. The South Indian railway was authorized to survey the Tirutaraipundi-Vedaraniem section, 20-20 miles, on behalf of the Tanjore District Board in order that the rival claims of the two lines might be carefully investigated. The survey has since been completed, but the results have not yet been received by the Railway Board.
·* 5′ 6°	207'35	2,31,94,256	
5' 6"	173'94	2,35,55,03 <b>5</b>	Surveys were carried out by the Great Indian Peninsula railway in 1905. Two alternative routes to Warangal have since been surveyed but the detailed project has not yet been received. A chord line from Bori (or Borkhedi) on the Nagpur branch to Hinganghat on the Wardha branch, 27 miles, is under survey. Pending receipt of the results of these surveys, the consideration of the projects submitted has been deferred.
5′ 6*	179.73	2,02,43,748	milited has been deferred.
<b>k</b> .			
			9 .

APPEN

			,,
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not-
N—concld.			
North and South railway-concld.	,		
(iii) Bellarpur-Warangal (or Kazipet)—			
Eastern route—Bellarpur via Ahiri and Sironcha to Warangal with a branch to Kazipet (Central Pro- vinces and Nizam's Hyder-	Great Indian Peninsula railway.	Bellarpur and Warangal	Surveyed
abad).  Western route - Bellarpur vid Ahiri and Sironcha to Warangal with a branch to Kazipet (Central Pro- vinces and Nizam's Hyder- abad).	Ditto	Ditto	Ditto
Direct route—Bellarpur to Kazipet with a branch to Warangal (Central Provinces and Nizam's Hyderabad).	D <b>iųo</b>	Ditto	Ditto
The proposals connected with the southern portion of the scheme are:—			
(i) Ramesvaram to Ramnad (Madras).	South Indian railway	Ramesvaram and Ramnad	Not surveyed
(ii) Ramnad, vid Trichinopoly, to a point between Tiruk- koyilur and Penruti (Mad-	Ditto	Ramnad and a point between Tirukkoyilur and Penruti.	Ditto
ras). (iii) From the terminus of (ii) to	Ditto	Terminus of (ii) and Arkonam	Ditto
Arkonam, (Madras). (iv) Renigunta-Gudur (Madras)	Ditto	Renigunta and Gudur	*******
Alternatives to (iii) and (iv).			*
Villupuram-Madras (Mad-	Ditto	Villupuram and Madras	******
Chingleput-Arkonam (Mad- ras).	Ditto	Chingleput and Arkonam	******
Villupuram to the terminus of (ii) (Madras).	Ditto	Villupuram and the terminus of (ii).	
Northern India and Ceylon connection.			
P.			
Paddapenki-Parvatipur branch (Madras).	*****	4	******
Palghat-Palni railway (Madras) .	•••••	*****	
Palni-Satyamangalam railway (Madras).	••••••	Palni to Satyamangalam with a branch from— Satyamangalam to Mettupalaiyam.	Surveyed Do
Panchkura-Luff Point (Bengal) .	Bengal-Nagpur railway	Panchkurs and Luff Point	Not surveyed *

DIX 38-A-contd.

Gauge.	Length.	Estimated cost.	REMARKS,
	Miles.	Rs.	
5' 6"	190,43	2,32,30,222	*.
5' 6"	184'35	<b>1,92,</b> 92,845*	Surveys were carried out by the Great Indian IPeninsula railway in 1905. Two alternative routes to Warangal have since been surveyed but the detailed project has not yet been received. A chord line from Bori (or Borkhedi) on the Nagpur branch to Hinganghat on the Wardha branch, 27 miles, is under survey. Pending receipt of the results of these surveys, the consideration of the projects submitted has been deferred
<sup>°</sup> 5′ 6″	148.62	1,44,36,200°	
5' 6"	. 43		The proposal contemplates the laying of a mixed gauge between Rannad and Mandapam, 23 miles, and the construction of 20 miles of new line.
s' 6'	195	·····	New construction.
5′ 6″	80		Ditto.
5′ 6 <b>″</b>	511		Conversion from the existing 3' 33" to 5' 6" gauge.
5′ 6″	101		Ditto Ditto.
5' 6"	39		Ditto ditto.
Mixed 3' 31 and 5' 6".	•••••	*****	Laying of a third rail,  The projects relating to the southern portion of the scheme were recommended by a Railway Commission which assembled in Madras in February 1903 with a view to effecting a through standard (5' 6") gauge connection between India and Ceylon.
•…••	******		See remarks under "North and South railway".
******	*****	*****	See " Dusi-Salur light railway ".
*****	*****		See " Dindigul-Palghat railway " of which it forms a part.
3' 3#"	84:36	84,33,040	
3' 3#"	17:53	25,03,225	
5' 6 <b>"</b>	25	******	This project was proposed by the Bengal-Nagpur Railway Company in 1900, coupled with proposals for establishing an export coal depôt at Luft Point. The latter question was investigated in 1903 by a Commission, whose conclusions were that a coal depôt at Luft Point would be of little use to the industry as a whole; that, though practicable, it would probably be costly; that it is not at present desirable to establish one at Luft Point; and that if established is should be in the hands of the Port Commissioners of Calcutta. The Government of India decided that the Port Trust of Calcutta should have the first refusal of constructing any such depôts or jetties at Luft Point or in its neighbourhood, and that, should that body decline to undertake the work, Government would be prepared to consider definite proposals from any substantial private firm or company for undertaking the combined scheme at its

<sup>•</sup> Excluding rolling stock.

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.	
P-concld.	,			
Pandharpur-Miraj extension (Bombay).	Barsi Light railway	Pandharpur and Miraj•	Survey sanctioned	
Parlakimedi-Baruva light railway (Madras).	*****	•••••		
Pathankot-Baijnath (or Palampur)	% *******		•••··	
Pathar Kandi Bazar-Magura Cherra tramway (Eastern Bengal and Assam).	*****	···		
Patiala-Jakhal railway (Punjab)	North Western railway (Rajpura-Bhatinda).	Patiala and Jakhal .	Surveyed	
Patiala•Jakhal railway extension (Punjab).	North Western railway (Southern Punjab).	Jakhal vid Hissar, Loharu an Kanaud to Narnaul.	d Not surveyed	
Patti-Lodhran railway (Punjab) .	North Western railway (Amritsar-Patti).	Patti to Lodhran vid Kasur, Hajr Dipalpur, Havelt and Pakpata	a. Under survey	
Pegu-Syriam railway (Burma)	Burma railways	Pegu and Syriam	Surveyed	
Pertabganj-Birpur-Choraghat rail- way (Bengal).	Bengal and North-Wes- tern railway (Tirhoot section).	Pertabganj and Ghoraghat .		
Phirangipuram-Gurzala branch (Madras).	Southern Mahratta, rail- way.	Phirangipuram and Gurzala .	Surveyed	
Phulbari-Sumjhia branch (Eastern Bengal and Assam).	Eastern Bengal State	Phulbari and Sumjhia .	. Surveyed	
Pilibhit-Barmdeo branch (United Provinces).	Rohilkund and Kumaon railway (Lucknow-Barcilly).	Pilibhit and Barmdeo .	Surveyed	
# Pilibhit-Shahjahanpur railway (United Provinces).	Rohilkund and Kumaon railway. (Lucknow-Bareilly).	Pilibhit and Shahjahanpur .	. Under survey	
Podanur-Palni railway (Madras).	Madras railway	Podanur and Palni	. Surveyed	
Pokhrayan-Auriya branch (United Provinces).	Great Indian Peninsula	Pokhrayan and Auriya .	. Reconnoitred	
	Burma railways	Prome and Meiktila	. Not surveyed	
Prome-Zadalin railway (Burma).	•••	••••••	·	
Puri-Astrang branch (Bengal)	Bengal-Nagpur railway.	Puri and Astrang	. Not surveyed	
Pyinmana-Magwe railway (Burma)	Burma railways	Pyiwin to Kyanzu		
		Kyanzu to Magwe	Not surveyed	
R. Raichur-Wondalli railway (Hydera- bad, Nizam's).	Great Indian Peninsula	Raichur and Wondalli	Surveyed by the promoters.	

### DIX 38-A-continued.

### corrected up to 31st December 1906.

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Gaoge.	Length.	Estimated cost.	Remarks
	343	Rs.	•
a' 6°	Miles.		The survey is being carried out by the Barsi Light railway from Imperial funds.
*****	*****	*****	See under " Ganjam District light railways".
*****	***		See "Kangra Valley railway".
*****			See under "Sylhet District tramways".
5' <b>67</b>	54'35	P41 400	This line has been proposed by the Patiala Durbar and would form chord between the Rajpura-Bhatinda and the Southern Punja railways. The preparation, at the cost of the Durbar, of alternativ projects on the 3'38' and 5'6' gauges has been sanctioned. The survey has been completed and the detailed projects are awaited.
*****	131		This line has been proposed by the Durbars interested. The proposals are under consideration.
5' 6"	242	<b></b>	This line will be constructed by the State as an integral part of th North Western railway. The Lodhran-Mailsi section, 39.7 mile has been surveyed and is estimated to cost Rs. 17,94,793 on the 5'6 gauge. It will comprise a large portion of the Changa Manga Pakpatan project.  The Amritsar-Patti Railway Company have applied for a concession to extend their line from Patti to Kasur. The application is under
3' 3%"	67.68	53,30.984	consideration.
3' 33"	15	Fe. ***	This line has been proposed to take the place of the existing Pertal ganj-Khanwaghat section, which will be abandoned. The result of survey have not been received by the Railway Board.
3' 38"	50.64	12,59,641	
3′ 3}"	13'48	4,41,745	
3′3≹″	3 <sup>8</sup> ·75		A resurvey of this line was ordered by the Home Board of the Rohilkur and Kumaon railway. This has been completed and the results a awaited. The line will be an extension of the Lucknow-Bareil railway and will be constructed from funds to be provided by t State. It will serve the lower Kumaon and the forests on the band of the Sarda river.
3′ 31″	56	·····	The Rohilkund and Kumaon Railway Company urged to be allowed to construct on the metre gauge a railway from Pilibhit vid Shahjaha pur to Sitapur, but the Secretary of State has approved of the construction by the Company of the Pilibhit-Shahjahanpur section on the remainder being superseded by the Rosa-Sitapur line to be constructed as an integral part of the Outh and Rohilkhand railway.
5' 6 <b>"</b>	65.24	88,04,307	This line is an alternative to the Palghat-Palni railway.
2' 0*	28	7,28,000	The line was reconnoitred in 1899 but the results have not yet been su mitted.
3' 3#"	176	1,13,00,000	This line was recommended in 1895 by the Chief Commissioner Burma as one that would tap the prosperous oil fields at Yenz choung.
•••••		<b>6</b>	See " Assam-Burma connection railway."
5′ <b>6″</b>	34	27,20,000	This line will, it is stated, have a certain protective value in famine tim and, if aligned parallel to the seashore and about 6 or 8 miles awa will pass through thickly populated tracts.
3' 3 <del>1</del> "	54°09 66	39,34,029	This line was proposed by the Government of Burma in 1905 wi a view to providing useful work in case famine should occur in the adjoining dry zone districts.
a' 6"	43	12,53,336	This line was proposed by a syndicate to serve the Wondalli go mines and the proposals were approved by the Secretary of Sta in 1300, but the scheme has not advanced. It will form a feeder the Great fiddian Peninsula and Madras railways.

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
R-soncid.  Raipur-Khurda railway (Central Provinces and Bengal).	Bengal-Nagpuprailway		Partly reconnoitred
Rangamatighat-Ghagrapara tram- way (Eastern Bengal and Assam).		••••	
Rangya-Tezpur railway (Eastern Bengal and Assam).	Eastern Bengal State railway.	Rangya and Tezpur	Surveyed
Rawalpindi-Murree railway (Pun- jab).	North Western railway .	Rawalpindi and Murree	Reconnoitred by the promoter.
Rewah-Sutna railway (Central India).	914	Rewah and Sutna	Surveyed
Rosa-Sitapur railway (United Provinces).	Oudh and Rohilkhand railway.	Rosa and Sitapur	Surveyed
Rowsara-Khagaria light railway (Bengal).	Bengal and North Western railway (Tirhoot section).	Rowsara and Khagaria	Apparently reconnoitred by the District Engineer, Monghyr.
S. Saidpur-Titalia branch (Eastern	Eastern Bengal State	Saidpur and Titalia	Surveyed
Bengal anu Assam).  Salem-Attur branch (Madras)	railway. Madras railway	Salem and Attur	
Salem-Porto Novo railway (Madras).	Madras railway	Salem and Porto Novo	Surveyed
Samastipur-Rowsara light railway (Bengal).	Bengal and North West- ern railway (Tirhoot section).	Samastipur and Rowsara	Not surveyed
Samastipur-Rowsara-Padri extension (Bengal).	Bengal and North West- ern railway (Tirhoot section).	Samastipur and Padri	Under survey
Sambalpur-Khurda railway (Central Provinces and Bengal).	Bengal-Nagpur railway	Sambalpur and Khurda	Surveyed
Santipur-Kalna extension (Bengal)	Eastern Bengal State	Santipur and Kalna	See "Remarks "
**************************************			

### DIX 38-A.—continued.

		T	
Gauge.	Length.	Estimated cost.	Remarks.
	Miles.	Rs.	
5′ 6°	, <b>295</b> }	. 3,02,51,043	This line was proposed as an alternative to the Sambalpur-Khurda railway. The Raipur-Sonpur section, 160 miles, was reconnoitred, the remaining portion being surveyed as part of the Sambalpur-Khurda railway. The Raipur-Vizianagran railway, which is now under construction, supersedes a section of this line.
*****	•••••• 4.		See "Mangaldai tramway."
3′ 3▮″	72'34	<b>27,19,983</b>	This line is strongly supported by the Government of Eastern Bengal and Assam on the grounds that it would serve an important tea district in the Mangaldsi sub-division and afford a powerful stimulus to the reclamation of the savannah country which is becoming gradually settled with time-expired garden coolies.
3′ 3³³* *	40	36,88,537	This line has been proposed by private enterprise. The estimates are for an electric railway excluding interest during construction and maintenance and promotion charges. Including these charges the estimated cost is Rs. 44,78,537.
2′ 67	32	7,61,810	This line will connect with the East Indian railway at Sutna. It was proposed with a view to providing relief on the occurrence of scarcity in the Rewah State. The line will probably be constructed by the Durbar.
5' 6"	51.36	38,74,471	This line supersedes the Shahjahanpur-Sitapur section of the Pilibhit-Sitapur railway proposed by the Rohilkund and Kumaon Railway Company. The Secretary of State has approved of its construction as an integral part of the Oudh and Rohilkhand railway.
Not stated, pro- bably 2' 6"	44	10,00,000	This line was proposed by the District Board of Monghyr in 1905. In conjunction with the Samastipur-Rowsara light railway proposed by the District Board of Darbhanga, it will form a chord between Samastipur and Khagaria stations on the Tirhoot State railway. The District Board have signified their intention of withdrawing their proposal in favour of the Darbhanga-Khagaria and Samastipur-Padriextensions proposed by the Bengal and North-Western railway, provided that the line is taken in hand before the end of 1908.
3′ 3¶″	66	29,84,000	This project has been held over until the site for the new Gangos bridge and the system of lines connected with it are finally settled.
5′ 6″	36.06	17,59,555	In 1903 the Secretary of State sanctioned the construction of this line as a State railway, but the commencement of work was not authorized pending provision of funds. The District Board of Salem has since expressed a desire to construct it on the metre gauge, but no decision has yet been come to as to how the capital required for its construction is to be raised.
3′ <sub>.</sub> 3‡″	116	69,86,000	This line also passes through Attur and therefore comprises the Salem-Attur project. It was proposed in 1887 as a famine protective line by the Government of Madras who have since put forward the Trichinopoly-Tirukkoy-jur railway in substitution of it. The approximate cost on the 5'6' gauge is estimated at Rs. 86,00,000.
Not stated, pro- bably 2' 6".	17 <del>1</del>	6,25,000	The District Board of Darbhanga proposed the construction of this line through the agency of a company under Bengal Tramways Act III of 1883. The Bengal and North-Western railway have since proposed an alternative line from Samas pur to Padri vid Rowsara and the District Board have intimated their willingness to withdraw their proposal in favour of the latter line if its construction is undertaken within a reasonable time.
3' 3 <del>1</del> "	34	•••	This line has been proposed by the Bengal and North Western railway and is alternative to the Samastipur-Rowsara light railway put forward by the District Board of Darbhanga,
5' 6"	190	2,37,00,000	The Government of Bengal has urged the early construction of this line by the State on administrative and political grounds.
2' 6"	61	••• •	This line will be an extension of the Ranaghat-Krishnagar branch. In 1904 orders were issued for the preparation of a detailed project for the extension and of alternative estimates for connecting the branch with the Ranaghat-Godagari railway on the 5' 6" gauge—  (i) by a 2' 6" gauge line from Raghabpur station to meet the 5' 6" gauge railway on the west side of the Churni bridge;  (ii) by extending (i) over the bridge right up to Ranaghat along
			the 5' 6' gauge alignment on a 4-rail mixed gauge.  The detailed project estimates are awaited.

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or n
		•	
S-contd.	,		
Sara bridge (Eastern Bengal and	′		, ,,,,
Sara-Sirajganj-Jagannathganj rail- way (Eastern Bongal and Assam).		(i) Sara to Sirajganj	Surveyed
		(ii) Sirajganj to Brahmaputra right bank.	Do.
		(iii) Brahmaput left bank to Jagannathganj with Subarnakhali branch.	Do.
Saraikala-Abbottabad-Srinagar rail- way (North-West Frontier Pro- vince and Kashmir).	North Western railway	Saraikala to Srinagar vid Ab- bottabad	Do.
•		Alternative Mandra to Srinagar vid Panjar	Do.
	•		*
Satara Road-Satara City railway (Bombay).	Southern Mahratta rail- way.	Satara Road and Satara City	Surveyed
Sealtic-Lala Bazar tramway (Eastern Bengal and Assam).		*****	•••
Shadipalli-Mehoo Suboo light railway (Bombay). Shadipalli-Samara light railway	}	·····	•••
(Bombay). Shambhuganj-Gauripur branch (Eastern Bengal and Assam).			
Shibnibash-Kotchandpur-Magura branch (Bengal).	Eastern Bengal State rail- way.	The three alignments surveyed and estimated for are—	
,		and Jhenida	Surveyed
٠.		with a branch from Jhenida to Sulkopa. (ii) vid Khallispur and Kali-	Do. Do.
•		ganj direct to Magura with a branch from Kaliganj	Do.
•		to Sulkopa, (iii) vid Khallispur, Kaliganj	Do.
		and Jhenida with a branch from Jhenida	Do.
Shwebo-Thabeitkyin railway (Burma).	Burma railways	to Sulkopa. Shwebo and Thabeitkyin	Surveyed
	_		*
Shwebo-Yeu light railway (Burma) (New project)	Burma railways	Shwebo and Yeu	Survey sanctioned
Sihor-Palitana branch (Kathiawar, Bombay).	Bhavnagar-Gondal-Juna- gad-Porbandar rail- way.	Sihor and Palitana	Surveyed
Silchar-Duarbund tramway (Eastern Bengal and Assam).			
Shohar-Tikalpur tramway (Eastern Bengal and Assam).	<b></b>		***
Singhjani-Sherpore-Nalitabari rail- way (Eastern Bengal and Assam)	•••	****** ****	
Singia-Madaripur-Chandpur rail- way (Bengal and Eastern Bengal and Assam).		Single and Bhedarganj	Sugreyed
	80 P. C. C. C. C. C. C. C. C. C. C. C. C. C.		
	•	Le la tanta de	Later Market

DIX 38-A.—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	Remarks,
	Miles.	Rs.	
•••	(	•	See "Ganges bridge at Godagari or Sara".
5' 6"	49.48	62,09,669	The estimates exclude the cost of a steam ferry across the Brahmaputra river amounting to Rs. 9,30,000.
5′ 6″	3.55	3,70,008	The project has been held over pending a decision on the question of a bridge over the Ganges at Sara.
3'31"	26.05	15,38,521	
<b>(</b> 5' 6"	200	2,98,85,284	The project, as now revised, provides for a 5' 6" gauge line from
{ 3'31"	203	2,44,93,474	Saraikala to Abbottabad worked as part of the North Western rail- way, and for a metre gauge line worked by electricity from Abbot-
( 5' 6"	182	3,02,04,184	tabad to Srinagar, the portions within British and Kashmir terri- tories being constructed and owned by the Government of India
{ 3′3³″	185	2,42,66,519	and the Durbar respectively.  A resurvey of the Sagaikala-Abbottabad section, 48 miles, has been ordered with instructions to prepare comparative estimates on the 5'6' gauge with ruling grades of 1 in 70 and 1 in 40 respectively.
3' 38"	10		The project estimates are awaited.
***	·		See under " Cachar District tramways".
•••			See under " Light railways in Sind ".
			See under "Dacca-Mymensingh railway extensions".
5′ 6″	51'75		
5' <b>6</b> "	12.00	49,94,494	This branch was proposed on the 2'6" gauge by a Calcutta firm i 1896 and is alternative to the Bongong—Kotchandpur line put forwar
5′ 6″	48.00	)	by the late Bengal Central railway on the 5'6" gauge. The Government of India expressed a preference for the former line and decide
5′ 6″	19.75	53,07,874	that it should be constructed on the same gauge (5' 6") as the parer line. Of the alignments examined, the Manager, Eastern Bengal States the parents of the same parents and No. (iii) the branch to Sullivan being parents.
5' 6"	55	} 52,49,115	railway, recommends No. (iii), the branch to Sulkopa being postpone until the trend of traffic on the Kumar river north of Magura habeen definitely ascertained.
5' 6"	12	<b>3-1491113</b>	been drame, assertance,
3' 3%"	30.02	14,42,845	This line was proposed to tap the Kabwet collieries and to open up the Ruby Mines district. If it stops at Letkobin, in which case the collieries will be served equally well, the length would be 22.75 mile and cost Rs. 9,93,840.
Not stated	22	•••	This line has been designed to open up the country to be irrigated the Shewbo and Yeu canals.
3′ 3¾″	17	5,20,791	This line was proposed by the Palitana Durbar, by whom it will pr bably be constructed. It would facilitate pilgrimages to the sacre shrines of Palitana to which pilgrims flock twice a year and wou also form part of the direct route to the port of Shiah Bet on the sou coast of Kathiawar.
			See " Cachar District tramways".
			See under "Dacca-Mymensingh railway extensions".
5' 6*	<b>→</b> 82·15	1,92,65,833	The cost by sections is as follows
			Miles. Cost.  Singia to Madaripur 63'34 1,23,46,885 Madaripur to Bhedarganj 18'81 69,18,948 The Madaripur-Bhedarganj section is considered impracticable on t

#### APPEN

		ζ.	
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
^ S-concld.	,		
Sirajganj-Ullapara railway (Eastern Bengal and Assam).	1	Girajganj and Ullapara	Surveyed by the promoters
Sonaripur-Ramnagar ghat extension (United Provinces).	· ···		
Sonepat-Saharanpur branch (Punjab and United Provinces).	East Indian railway (Delhi-Umballa-Kalka).	Sonepat and Saharanpur	Not surveyed
Sointilla-Sonpur branch (Bengal) .	1	Sointilla and Sonpur	Surveyed
Southern Shan States railway (Burma).	Burma railways	Nyaungyan and Sang Hai	Surveyed
	•		
Sri Madhopur-Borawar Chord (Rajputana).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Sri Madhopur and Borawar	Not surveyed
Sir Madhopur-Sikar branch (Raj- putana).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Sri Madhopur and Sikar	Surveyed
Srimangal-Manumukh tramway (Eastern Bengal and Assam).	)		
Sutang-Madna tramway (Eastern Bengal and Assam).		•••••	•••
Sylhet District tramways—	,		
Sutang-Madna tramway (Eastern Bengal and Assam).		Sutang and Madna	Reconnoitred by the pro- moters.
Srimangal-Manumukh tramway (Eastern Bengal and Assam).	Assam-Bengal rail- ≺	Srimangal and Manumukh	Ditto Ditto
Kalaura-Chhatak tramway (Eastern Bengal and Assam).	way.	Kalaura and Chhatak via Sylhet	Ditto Ditto
Karimganj-Chandi Khira tram- way (Eastern Bengal and Assam).		Karimganj and Chandi Khira with a branch from Pathar Kandi- Bazar to Magura Cherra,	Ditto Ditto
			*
T			
Tando Muhammed Khan-Mirpur Buttora branch (Bombay).		······································	•••
Taragupet (Bangalore)-Chikballa- pur light railway (Mysore).	•••		•••
Taungup branch (Burma) .	***	.0. 000	***
Tinnevelly-Tiruchendur railway (Madras).	South Indian railway	Tinnevelly and Tiruchendur	Surveyed
Trichinopoly-Thondi branch	South Indian railway	Trichinopoly and Thondi	Not surveyed
(Madras).	1	1	1

### DIX 38-A .- continued.

Gauge.	Length.	Estimated cost.	Remarks,
	Miles.	Rs.	
2′6″	18	1 <b>•1,00,0</b> 00	This line has been proposed for construction by private enterprise, in the interests of jute and other traffic, with the help of a guarantee from the District Board of Pabna. Further proposals are awaited from the promoters.
•••			See " Dudhwa branch extension to Ramnagar ghat ".
5′ 6″	60	48,00,000	
5′ 6°	48.24	30,62,444	This branch was projected to connect at Sonpur the Raipur-Viziana-gram railway with the Sambalpur-Khurda line.
2′ 6 <sup>®</sup>	112'2	68,57,667	This line was projected in order to afford railway communication between the wheat-growing districts in the Southern Shan States and the port of Rangoon.  The Railway Board deputed an officer in 1906 to examine on the spot the project prepared for a 2' 6" gauge line and have since directed the preparation of a detailed project on the metre gauge in accordance with the report submitted by the officer.
3' 3%"			This chord has been suggested in order to reduce the through metre gauge mileage between Delhi and Karachi.
3' 33"	30.68	8,69,413	
			See under "Sylhet District tramways".
2′ 6"	30	11,54,407	These lines were proposed in the interests of the tea industry and as feeders to the Assam-Bengal railway. The proposals fell through owing to the inability of the local administration to guarantee interest
2'6"	221	8,81,567	on capital at 3 per cent, per annum which the promoters had asked for.
2' 6"	53	20,04,376	The Kalaura-Chhatak project is superseded by the Kalaura-Sylhet line, which is now under construction.
2′ 6 <b>″</b>	43	12,00,000	
***			See " Lower Sind branches ".
***	•••		See "Bangalore (Taragupet)—Chikballapur light railway ".
•••			See under " Assam-Burma connection railway ".
3′ 3 <b>‡″</b>	37,60	20,52,003	This line has been proposed by the District Board of Tinnevelly from whom proposals for its financing are awaited.
3' 31"	. 86	37,50,000	A part of this scheme will probably be financed by the District Board of Madura.
. 100		-	

### APPEN

Name of project, and, in brackets, the province in which it is situated.  Existing railway system with which the project is constructed the initial print.  Trichinopoly-Tirukkoyilur railway (Madras).  Trichinopoly-Tirukkoyilur railway (Madras).  Tumsar road-Katangi railway (Central Provinces).  V. V. Vadnagar (or Vinagar)-Vijapur cattension (Bombay).  Vaigai Valley railway (Madras).  Vinagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vadnagar)-Vijapur cattension (Bombay).  Visagaer (or Vijapur cattension (Bombay).  Visa				The state of the s
Tumsar road-Katangi railway (Central Provinces).  V.  Vadnagar (or Visnagar)-Vijapur extension (Bombay).  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Visnagar to Vijapur  Vizianagram-Bimlipatam branch (Madras).  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Jammalamadugu gu.  Vizianagram and Jammalamadugu gu.  Vizianagram and Jammalamadugu gu.  Vizianagram and Jammalamadugu gu.  Vizianagram and Jammalamadugu surveyed  Not surveyed      Vizianagram and Jammalamadugu surveyed     Vizianagram and Jammalamadugu surveyed	the province in which it is	with which the project is connected at the	Initial and terminal points.	Whether surveyed or not.
V.  Vadnagar (or Visnagar)-Vijapur extension (Bombay).  Vaigai Valley railway (Madras)  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Bombay, Baroda and Central India railway (Gaekwar's Mehsana).  Visnagar to Vijapur  Vizianagram-Bimlipatam branch (Madras).  Visnagar to Vijapur  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Jammalamadugu branch (Madras).  Z.  Zadabin-Zibingvi railway (Burma)		South Indian failway	Trichinopoly and Tirukkoyilur	Reconnoitred
extension (Bombay).  Vaigai Valley railway (Madras) .  South Indian railway Ammayanayakkannur to Kotagudi with extensions: -  (i) Perragudipad-Jammalamadugu branch (Madras).  South Indian railway Ammayanayakkannur to Kotagudi with extensions: -  (i) Near Theni (mile 39) to Uttamapalaiyam.  Visnagar to Vijapur Surveyed  Alternative.  Vadnagar to Vijapur Do  Vizianagram-Bimlipatam branch (Madras).  Y.  Yerragudipad-Jammalamadugu branch (Madras).  Z.  Zadabin-Zibingyi railway (Burma)	(Central Provinces).	Bengal-Nagpur railway		Dista
Vaigai Valley railway (Madras) . South Indian railway Ammayanayakkannur to Kotagudi with extensions:—  (i) Perivakulam to Krishnama Naik's tope.  (ii) Near Theni (mile 39) to Uttamapalaiyam.  Visnagar (or Vadnagar)-Vijapur extension (Bombay). Baroda and Central India railway (Gaekwar's Mehsana).  Vizianagram-Bimlipatam branch (Madras).  Vizianagram-Bimlipatam branch (Madras).  Vizianagram and Bimlipatam Not surveyed Not surveyed Yerragudipad-Jammalamadugu branch (Madras).  Z. Zadabin-Zibingyi railway (Burma)	Vadnagar (or Visnagar)-Vijapur		.*****	
Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Bombay, Baroda and Central India railway (Gaekwar's Mehsana).  Visnagar to Vijapur	•	South Indian railway		1
Visnagar (or Vadnagar)-Vijapur extension (Bombay).  Bombay, Batoda and Central India railway (Gaekwar's Mehsana).  Vizianagram-Bimlipatam branch (Madras).  Y.  Verragudipad-Jammalamadugu branch (Madras).  Z.  Zadabin-Zibingvi railway (Burma)  Visnagar to Vijapur		•	(i) Perivakulam to Krishnama Naik's tope,	Sce "Remarks"
Central India railway (Gaekwar's Mehsana).  Vizianagram-Bimlipatam branch (Madras).  Y.  Verragudipad-Jammalamadugu branch (Madras).  Z.  Zadabin-Zibingyi railway (Burma)  Central India railway (Gaekwar's Mehsana).  Alternative. Vadnagar to Vijapur Do  Vizianagram and Bimlipatam Not surveyed  Vizianagram and Bimlipatam Vorragudipad and Jammalamadu- gu			Uttamapalaiyam.	}
Vizianagram-Bimlipatam branch (Madras).  Vizianagram and Bimlipatam Not surveyed  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vizianagram and Bimlipatam  Vorragudipad and Jammalamadu- Surveyed  Z.  Zadabin-Zibingvi railway (Burma)	Visnagar (or Vadnagar)-Vijapur extension (Bombay).	Central India railway		Surveyed
Y.  Yerragudipad-Jammalamadugu branch (Madras).  Z.  Zadabin-Zibingvi railway (Burma)  Madras railway Yerragudipad and Jammalamadu-gu		(Catewar streams).	Vadnagar to Vijapur	Do
Yerragudipad-Jammalamadugu branch (Madras).  Z. Zadabin-Zibingvi railway (Burma)  Madras railway Yerragudipad and Jammalamadugu surveyed	(Madras).	Bengal-Nagpur railway	Vizianagram and Bimlipatam	Not surveyed
Zadabin-Zibingvi railway (Burma)	Yerragudipad-Jammalamadugu	Madras railway	Yerragudipad and Jammalamadu	Surveyed
	2.			
	Zadabin-Zibingyi railway (Burma)	900		
				·
				,
	•		\ '	

### DIX 38-A-concluded.

Gauge.		Length.	Estimated cost.	Remarks.
		Miles.	Rs.	•
3′3≹	,	96·75	74,43,000	This line was recommended by the Madras Government in 1899 in substitution of the Salem-Porto Novo project and was also recommended by the Railway Commission of 1903 as part of the 5'6" gauge rout connecting India and Ceylon. It will shorten the distance between Madras and districts south of Trichmopoly by 37 miles. The Sout Indian Railway Company have, since the close of the year, bee permitted to survey this line, the survey being adapted to the require ments of the 5'6" gauge.
5′ 6′	,	32.89	20,40,477	This line has been projected in order to serve the manganese mine in the Central Provinces.
5' 6'	'	10	5,44,435	
•••		•••		See "Visnagar (or Vadnagar)-Vijapur extension".
2' 6'	,	55	1	This line was surveyed by a syndicate who estimated an approxima outlay of Rs. 29,377 per mile. A concession was granted to the syndicate in rest line and the proposed it was the proposed in the syndicate in the syndicate in the syndicate in the syndicate in the syndicate in the syndicate in the syndicate in the syndicate in the syndicate in the syndicate who estimated an approximate outlier to the syndicate who estimated an approximate outlier to the syndicate who estimated an approximate outlier to the syndicate who estimated an approximate outlier to the syndicate who estimated an approximate outlier to the syndicate who estimated an approximate outlier to the syndicate who estimated an approximate outlier to the syndicate who estimated an approximate outlier to the syndicate who estimated an approximate outlier to the syndicate in the syndicate in the syndicate in the syndicate who estimated an approximate outlier to the syndicate in the sy
2' 6'	•	5	See "Remarks"	
2′ 6	"	18		A large portion of this project is covered by the Ammayanayakkannu Uttam palaiyam line proposed by the District Board of Madura.
3′ 38	"	,16	5,34,280	This line will lie entirely within the territory of the Baroda Darbar will construct it Earthwork for famine relief purposes was sanctioned.
3′ 3	3*	16.93		in 1904.
5′ 6′	,	15	9,39,000	In 1905 a Madras firm urged the construction of this line by the Sta in the interests of traffic in manganese, but the scheme is not su ported by the Government of Madras.
a' 6' 5' 6'	" }	24'05	10,45,904 12,46,831	
•••		•••		See " Assam-Burma connection railway".
				,

### APPENDIX 39.

Statement showing the total working expenses on the principal railways in India during the year 1906 and the ratio between coaching and goods under gross receipts, total train-mileage and gross ton-mileage.

5' 6" GAUGE LINES.

				GROSS R	ECEIPTS.	TRAIN-	MILES.	TON-I INCLUDII WEI	MILES NG DEAD GHT.
	RAILWAY SYSTEM. (Vide APPENDIX 38.)		Total working	Arpeni	or <b>x</b> 18.	Arren	DIX 18.	Appen	orx 18.
ų.	(* ************************************		,	Item No. 21.	Hem No. 89.	Item <sup>e</sup> No. 22.	Item No. 90.	Item No. 78.	Item No. 109.
Number.	*			Coaching.	Goods.	Coaching.	Goods.	Coaching.	Goods
			(In lakha.)	(In lakhs.)	(In lakhs.)	(In thousands.)	(In thousands.)	(In millions.)	(In millions.)
1 (a) {	Bengal-Nagpur		122-22	80.61	171-24	2,435•56	3,646.40	636.03	1,687:44
, (a) [	Ratio			1	212	1	1.50	1	2:65
9 (0) (0)	Bombay, Baroda and Central India		108.63	76-96	146-26	2,296·12	1,899-16	<b>587</b> ·19	899·17
2 (a) to (f)	Ratio			1	1.30	1.61	1	1	1.23
9 (2	Eastern Bengal State		53 18	51-40	83.59	1,890•44	1,422-49	4 <b>7</b> 5·87	592-88
8 (a }	Ratio			1	1 63	134	1	. 1	1'25
4435	East Indian		321.75	251.00	562.05	7,527-83	9,818-47	<b>2,84</b> 2·72	6,095-27
4 (a) to { (d).	Ratio			1	2.24	1	1.30	1	2.60
	Great Indian Peninsula		820 55	190:35	442.98	7,484-77	8,216-61	1,908-85	3,575.89
5 (a) to (f).	Ratio			1	2:33	1	1.10	. 1	1.87
	Madras		127.09	79:87	127.60	2,270.79	2,798.73	555-51	1,102-94
6 (a) to { (d).	Ratio			1	1.60	1	1.53	1	1.99
	Nizam's Gusranteed State		18:43	11:32	34:82	331 51	740-59	94.80	298-01
8 (a) & { (b). }	Ratio			1	3.08	1	2 23	1	8-14
9 (2) 12	North Western State		355-24	212-10	458.36	8,499-13	9,837-19	1,976-87	4,441.50
9 (a) to {	Ratio			1	2.16	1	1.16	1	2.2
10 (4) 4)	Oudh and Rohilkhand State		88.53	78-59	77-27	3,183•80	1,998-51	786-97	825-28
10 (a) & {	Ratio	•••		1.02	1	1.59	1	1	1-12
							1		

### APPENDIX 39-concld.

Statement showing the total working expenses on the principal railways in India during the year 1906 and the ratio between coaching and yoods under gross receipts, total train-mileage and gross ton-mileage.

3' 3%" GAUGE LINES.

			0 0	§" GAUGE L	INES.				
				GROSS R	ECEIPTS.	TRAIN-	MILES.	TON-M INCLUDIA WEI	IILES NG DRAD GHT.
	RAILWAY SYSTEM. (Vide APPENDIX 38.)	•	Total working expenses.	APPENI	orx 18.	Appeni	oix 18.	Appru	DIX 18.
er,	,			Item No. 21.	Item No. 89.	Item No. 22.	Item No. 90.	Item No. 73.	Item No. <b>109.</b>
Number.	reconstruction on V VIII Accommendation and applications and an accommendation of	-		Coaching.	Goods.	Coaching.	Goods.	Coaching.	Goods.
			(In lakhs.)	(In lakhs.)	(In lakhs.)	(In thousands)	(In thousands)	(In millions.)	(In millions.)
11 (0)	Assam-Bengal		37:92	16.96	22.41	618.76	977:19	114:46	216.81
(	Ratio	•••		1	1.32	1	1.28	1	1.89
12 (a) & { (b). }	Bengal and North-Western	•••	69.93	64.08	78-27	2,624.79	2,363-23	495.29	626-01
(0). (	Ratio	•••		. 1	1.22	1:11	1	1	1.36
14 (a) to (	Bhavnagar-Gondal-Junagad-Po	rbandar	10.98	11.83	9.00	372-04	236-44	59-30	49-63
(d). to	Ratio	•••		1.31	1	1.57	1	1.20	1
(	Burma	***	98·70	71:40	82.47	2,029-06	3,088-61	412-14	689-15
15 (a) {	Ratio			1	1 16	1	1.52	1	1.67
(	Eastern Bengal State		58.32	41·26	56.80	1,885.29	1,299.64	201.16	820-72
3 (b) and (c).	Ratio			1	1.38	1.03	1	,	1.69
C	Hyderabad-Godavarı Valley		16:11	10.82	19:18	373•82	560-73	69-39	111-85
8 (0)	Ratio			1	1.86	1	1 50	1	1-60
,	Jodhpur-Biksner	•••	18· <b>6</b> 6	14.66	25 12	568-89	791.89	108.90	164-20
18 (a) to }	Ratio			1	1-71	1	1 29	1	1.58
	Rainutana-Malwa		129:47	97:14	175.70	8,709-67	4,281.48	657-91	1,212-32
3 (g) to {	Ratio			1	1.81	1	1.13	1	1.84
	Robilkund and Kumaon		12:57	11.07	12-13	380.98	391.72	90.77	84-24
20 (a) & {		•••		1	1.10		1.03	1.08	1
21 (a) to }	South Indian	•••	81.00	79:41	62:67	2,893·50 1·05	2,274.63	412.84	479 01
(	Ratio	•••		1.27	1	1.09	1	, 1	1-16
22 (a) to {	Southern Mahratta	•••	74-12	45.56	75-42	1,990-24	2,864.59	313-15	692-55
, w, {	Ratio	•••		1	1.66	* 1	1.44	1	1.89

#### APPENDIX 40.

Memorandum by the Railway Board on the results of Indian Railway working 1906-1907 and proposals for 1907-1908, as published in the Financial Statement.

#### CAPITAL EXPENDITURE.

The capital expenditure during the yeaf 1906-1907 will amount to Rs. 14,61,16,000 (£9,741,100) being nearly a crore in excess of the expenditure for the year 1905-1906.

- 2. The expenditure in 1905-1906 includes a sum of approximately  $114\frac{1}{2}$  lakks advanced to the Delhi-Umballa-Kalka Railway Company for the construction of the Kalka-Simla railway, and adjusted against the head "48—State Railways, Construction" on purchase of the railway from the Company by Government. Excluding this special item, the increase over the expenditure in 1905-1906 will be nearly  $2\frac{1}{4}$  erores.
- 3. For the year 1907-1908 these figures have been greatly reduced. The estimate provides for spending a sum of  $13\frac{1}{2}$  erores (£9,000,000), a reduction of 10 per cent. on the provision of last year.
- 4. Under the head of lines already open, including the provision for additional rolling stock, the amount expended in 1906-1907 will be  $919\frac{1}{4}$  lakhs (£6,129,300), showing an advance of about 151 lakhs over the expenditure under the same head for the previous year. Under the same heads in 1907-1908 provision is made for 1,013 $\frac{1}{4}$  lakhs (£6,755,000), an increase of about 10 per cent.
- 5. A comparison showing capital expenditure for 1907-1908 and the previous five years is contained in the following statement:—

	Lines already	LINES UNDER				
		Started in provious yours.	Started in current year.	Total.	Equivalent in sterling.	
1902-1903 (actual expenditure) . 1903-1901 ( ,,  ,,  ) . 1904-1905 ( ,,  ,,  ) . 1905-1906 ( ,,  ,,  ) . 1906-1907 (latest grants) 1907-1908 (proposed grants) .	Lakhs.  4,81.74 5,58.77 5,02.76 7,68.19 9,19.39 10,13.24	Lakhs.  4,52·50 3,13 68 4,86·91 5,49·46 5,10·20 3,36·76	Lakhs. 71.52 84.62 88.62 32.26 31.57	Lakhs.  10,05.76 9,57.07 10,78.29 13,49.91 14,61.16 13,50.00	£ 6,705,064 6,380,468 7,188,600 8,999,430 9,741,100 9,000,000	

<sup>6.</sup> The information showing in detail how the expenditure in 1906-1907 and 1907-1908 will be distributed is contained in statement A attached to this memorandum

The programme for 1907-1908 as originally framed contemplated an outlay of Rs. 15 crores. Financial considerations, however, necessitated its reduction to Rs. 12 crores, for which figure it received Secretary of State's sanction. It was subsequently increased by Rs. 1½ crores and now stands at Rs. 13½ crores.

7. The mileage of lines of all gauges open to traffic on 1st April 1906 was 28,611 and under construction 2,534; on 1st April 1907 there will be 29,571 open and 2,535 under construction. At the end of the coming year there will be 1,703 miles under construction.

#### RAILWAY REVENUE ACCOUNT.

8. The Railways of India, taken as a whole, have for a succession of years shown a balance to the credit of general revenues, after allowing for working expenses, interest on capital expended, charges for annuities in redemption of capital and miscellaneous railway expenditure. The following table shows the approximate figures for 1906-1907 compared with the actual results for the previous five years:—

[Figures in rupees, omitting 000.]

							****	
				Gross receipts.	Working expenses.	Interest charges, etc.	Surplus of Revenue over expenditure.	Equivalent in sterling.
			İ	R	R	<del>R</del>	R	£
Actuals—			- 1		•			
1901-1902			٠.١	80,33,90	14,23,85	14,88,06	1,26,99	846,600
1902-1903		•	٠.	30,20,08	14,74,08	15,11,66	34,34	228,900
1903-1904	٠.			32,33,68	15,56,72	15,47,86	1,29,10	860,700
1904-1905				36,03,37	16,94,32	15,98,28	3,15,82	2,105,500
1905-1906	•	•		36,89,12	*16,95,16	16,93,67	3,00,29	2,001,900
Estimate-								
1906-1907		•		39,71,89	19,14,29	17,33,96	8,23,64	2,157,800
			(		}	ļ	1	

<sup>\*</sup>Norsi-The figures to end of 1904-1905 include the companies' shares of surplus profits, now shown under interest charges, etc.

Compared with the results of the previous year the figures for 1906-1907 show an improvement of Rs. 23,35,000 (£155,900). The receipts are more by Rs. 2,82,77,000 (£1,885,200), the working expenses are higher by Rs. 2,19,13,000 (£1,460,900), while interest charges, etc., have increased by Rs. 40,29,000 (£268,400).

#### GROSS RECEIPTS.

- 9. In 1905-1906 the gross receipts of railways showed a large improvement over those of the previous year consequent on the opening of new lines, development of passenger traffic on existing lines, and larger movements of food grains as a result of scarcity in Guzerat, Kathiawar, Central India and certain districts in the Madras and Bombay Presidencies. The improvement was general on all railways with the exception of the North Western railway, on which there was a falling-off of over 60 lakks due mainly to short exports of wheat to Europe owing to the uncertainty as to the prospects of the wheat crops of 1906-1907.
- 10. In the current year while there has been a set-back in the earnings of the Great Indian Peninsula railway due to a falling-off in traffic in raw cotton, wheat and other grains, the earnings from other railways have continued to expand, notably under goods traffic of the East Indian railway, and in jute and grain traffic on the Eastern Bengal State railway, the latter being the result of soarcity in Eastern Bengal. The earnings of the Indian Midland railway also show a phenomenal increase due to large movements of food grains and other merchandise, while those of the North Western railway are expected to reach practically the same figures as were obtained in 1904-1905.

11. The more important increases are:

- '					Rs.
East Indian	••	•••	***	• • •	38,69,000 🐞
Eastern Bengal State .	••	•••	•••	•••	40,01,000
Indian Midland	••	•••	•••	•••	24,22,000
North Western .	,	•••	•••	•••	61,88,000
The principal decrease be	ing:-	•	•		
Great Iudian Peniusula .	••	•••	•••	•••	19,22,000

#### WORKING EXPENSES.

12. The increase in working expenses during the year 1906-07 is estimated to amount to Rs. 2,19,13,000 (£1,460,900). This increase to a large extent is due to increased traffic on certain lines of which the North-Western, Eastern Bengal Statesand Indian Midland railways are the most prominent examples.

These three lines will have carned more than a crore and a quarter of rupees (£833,300) in excess of their carnings during the previous year, and this increase in earnings necessitates increased working expenses.

- 13. That working expenses would tend to increase was indicated by the Railway Board in their memorandum of last year. The reasons that were given for their opinion apply now as when written a year ago.
- 14. Railways in India have now to run faster trains, provide better carriages, improve the conditions under which third class passengers are carried, introduce a more elaborate system of signalling, and generally conduct their business under more up-to-date methods than were in use in the past.
- 15. Some of these improvements will lead to increased revenue. Some will not, but have to be provided to meet the public demands.
- 16. The cost of many of these improvements being in the nature of renewals has to fall to a considerable extent on revenue.
- 17. During the period this raising of the standard is being carried out working expenses must rise, though in the end, under some items, more economical working should be secured.
- 18. To enable railways to carry the heavy traffic offering the permanentway has to be improved and girders strengthened. Most lines now when making branches wish to use their light main line rails in these branches and renew the main line with heavier rails.
- 19. This is a sound business arrangement, but carrying out the policy indicated means that revenue has to renew before the rail itself is nearly worn out. The result is increased debits to revenue for a time, causing increased working expenses. The Board hope that a practical solution may be found to meet this difficulty, so that working expenses may be steaded and not liable to unnecessary fluctuations.

#### NEW LINES TO BE CONSTRUCTED.

20. Owing to the reduction in the programme, the heavy demands on account of open lines, and the large mileage of lines at present under construction, no expenditure on new lines is proposed during the year 1907-08.

#### OPEN LINE REQUIREMENTS.

21. The total amount allotted during 1907-1908 to open lines, viz., 10,18‡ lakhs (£6,755,000) out of a total for the year of 13,50 lakhs (£9,000,000), has been divided between general open line requirements and additional rolling-stock requirements approximately as follows:—

,				Lakhs
				Ra.
1907-1908	Open line requirements Rolling-stock		•••	4451
	(Rolling-stock	•••	•••	568

This shows a decrease of 64 lakhs under open line requirements and an increase of 186 lakhs under rolling-stock, in comparison with the provision made under these heads in 1906-1907, the figures for which were as follows:—

				Lakhs.
1906-1907	Open line requirements Rolling-stock	•••	•••	509
2000-2001	Rolling-stock	***		382

#### ROLLING-STOCK.

- 22. In their memorandum on the Budget last year, the Railway Board definitely stated that the then standard of equipment of Indian Railways in the matter of rolling-stock was below the requirements. Acting on this opinion they made the very large provision of 382 lakhs, to be spent for rolling-stock during the year 1906-1907, and this money has all been spent. The sum of 382 lakhs represents in sterling about  $2\frac{1}{2}$  million pounds and was  $\frac{3}{4}$  of a million pounds sterling more than the allotment provided for 1905-1906.
- 23. For the ensuing year 1907-1908, they have made a provision of 568 lakhs or about  $3\frac{3}{4}$  million sterling for rolling-stock, which provision has met in full the demands of all railways for grants for rolling-stock for that year.

This increased provision of rolling-stock, coupled as it is with the necessity for providing additional sums for open line works, to enable the increased stock to be worked efficiently, has exhausted the funds at the Board's disposal, with the result that no new lines can be put in hand, until next year at the earliest.

24. The Railway Board are as fully aware, as the public are, of the urgent necessity for more rolling-stock, and have consistently done as much as they were able, with the funds placed at their disposal.

# COMMUNICATION BETWEEN PASSENGERS AND GUARD OF A TRAIN.

25. The provision of an effective means of communication between passengers and the guard being a matter that seriously affects the safety of the travelling public, orders were issued by the Railway Board for the adoption on all railways in India of the type of communication now in general use in England. The North Western, Oudh and Rohilkund and Eastern Bengal State railways were instructed to at once provide this means of communication on now and rebuilt stock, and to fit the communication to the existing stock of all classes as rapidly as possible. The work of fitting the existing carriages of companies' railways is, with certain exceptions, required to be completed within two years from the date of the order.

#### GENERAL.

- 26. In order to encourage imports into tracts suffering from fodder famine the administration of the North Western railway was instructed to help the movement of bhusa from the Punjab, and specially from the canal colonies by quoting low rates. Rates were accordingly reduced by them, and the Oudh and Rohilkund, East Indian, Bombay, Baroda and Central India, Jodhpur-Bikaner and Gwalior Light railways followed suit. These reductions resulted in great benefit to the famine-stricken tracts.
- 27. Attention is invited to statements B and C attached to this memorandum which contain information of interest.

### STATEMENT A.

Statement of anticipated capital expenditure on railways, open and under construction, for the year 1907-1908.

(Figures in lakhs and decimals of lakhs.)

No.					1	Railw	AT.					•				Grants allotted for 1906-1907,	Distributio grants dur 1907-1900	n ring 8,
			I. (				LIN State		ENCY.	to terreno	*************		<del>,</del>			R	R	
1	Eastern Bengal — Main line		_ `	,		•	<del>,</del> -				•							
2	Murshidabad Bra	nch	•	•	•	•	•	•	•	•	•	•	•	•		<b>58·13</b>	91-	79
8	Kaunia-Bonarpar									•						2.77		
.4	Jodhpur-Hyderabad (B		sect	ion)												0.14	-0:	18
	North Western-																	
5	Main line	•	•	. •	•	•	•	•	•	•	•	•	•	•	•	184-16	159	
6	Jech-Doab (South	ern s	octio	n)	•	•	•	•	•	•	•	•	٠.	•	•	7:09	1	.18
7	Kalka-Simla	•		•	•	•	•	•	•	•	•	•	•	•	•	45.94		·07
8	Robri-Samasata,		ing	•	•	•	•	•	•		•	•	•	•	•	39.34	13.	-
9	Shahdara-Sangla		•	•	•	•	•	•	•	•	•	•	•	•	•	8.01	3.	65
10	Oudh and Rohilkhand- Main line .				•											26.04	32*	<b>'08</b>
11	Allahabad-Jaunp	ur		•						•	•					4.50	1.	•66
12	Warora Colliery .				•		•	•	•				•			-1.68		
13	Reserve							•							•		163	42
							Total	Open	lines	, Stat	e, by	State	Ager	10 y		374.44	470	-58
		1. (	ii) —	Stat:	e, ey	A A	ENCY	of (	Comp.	AN IES								-
14	Assam-Bengal .				•					•				•		25.15	25	·Q(
	Bengal and North-Wes	tern-	-															
15	Tirhoot .	•	•	•	•	•	•	•	•	•	•	•	•	•	•	22.25	<b>16</b>	
16	Sakri-Jainagar	•	•	•	•	•	•	•	•	•	*		•	•	•	را	1	.66
17	Bombay, Baroda and C Main line	jentra •	• 14	118		•				•	•		•	•	•	15.89	15	0
18	Palanpur-Deesa						•	•			•			•	•	0.03		
19	Rajputana-Malw	s. *														35.41	27	-2
20	Rewari-Phulera							•	•							3.60	0	-24
	East Indian-															<b>160·10</b>	100	
21	Main line		٠.	•	•	•	•	•	•	•	•	•	•	•	•	10.00	į	
22	Agra Junction B		anj	•	•	•	•	•	•	•	•	•	•	•	•	1000	°	3·0:
23	Great Indian Peninsula Main line	a —	•							•		٠	•			49.54	94	11
24	Agra-Delhi chor	a		•	•		•	•	•		•	•	٠	•	٠.	4 64	2	-2
25	Bhopal-Itarsi (B	ritich	ı sect	ion)	•		•	•		•	•	•	•	•	•	. 0.91	1	L•7
64	Madras-								_							0-58		i • 20
26	Nilgiri .	•	•	•	•	•	•	•	•	•	•	•	•	•	•	6-80	- t	
27	North-East line		•	•	•	•	•	•	•	• - <u></u>	•	•	•	•	•		1	# <b>4</b>
28	Nizam's Guaranteed Si Bezwadą extension	DII FREE	•	•	•	•	•	•		<b>F</b> .	•	•	•	•	•	0.0	8 0	0-0
		*								,		Car	rried (	orex	•	884-37	806	5-44

## Capital Expenditure on Railways, 1907-1908—contd.

(Figures in lakhs and decimals of lakhs.)

	Rai	LWAY.	•							/ a;	Granfy lotted for 1906-07.	Distribution o grants during 1907-08.
	•										Rs.	Rs.
						Brot	ight i	forwa	rd		334 37	805.40
	A.—OPEN L	INES-	-concle	ł.							٠,	
	I. (ii)—STATE, BY AGEN	CY OF	Compai	NIES-	conci	d.						
29	Main line		_			_	_				<b>27</b> ·00	28-25
30	Travancoro branch (Native State section)										0.03	0.20
31	" " (British section) .										0.20	0.30
-	Southern Mahratta-			·	-	-		-				
32	Guntakal-Mysore Frontier										0.05	0.10
-							•			-		
	Total	Open L	ines, St	tate, b	y Ago	ncy o	f Cor	npani	e <b>s</b>	•	361.65	334-15
	II.—FROM CAPITAL OF OR	LD GUA	Bantei	ED Co	MPAN	IES.						
	Madras—											
33	Main line		•	•	•	٠	•	•	•		22.92	26.70
34	Calicut-Azhikal	• •		•	•	•	•	•	•	•	12	0.40
35	Bombay, Baroda and Central India .		•	•	•	٠	•	•	•	$\cdot$	11	
		•								-		
	T	otal Op	en Line	es, Old	l Gna	rante	od Co	mpan	ies		23.15	27.10
	III FROM CAPITAL OF COMPANIES O	THER T	HAN O	ed Gr	ABAN	TEED	Сом	PANIE	8.			
	III.—FROM CAPITAL OF COMPANIES O Bengal-Nagpur—	THER T	HAN O	LD GU	ARAN	TEED	Сом	PANIE	8.			
36	Bengal-Nagpur—	THER T	HAN O	LD GU	ABAN	TEED	Сом	PANIE ,				9:71
36 37	Bengal-Nagpur—	THER T	HAN O	ed Gu	ABAN	TEED	Сом •	PANIE	•		00.00	9:71
	Bengal-Nagpur—  Main line	THER T	· ·	LD GU	ABAN	TEED	Сом	PANIE ,	•		89-91	1
37	Bengal-Nagpur—  Main lino	THER T	HAN O		ABAN	TEED	Com	PANIE	•		89-91	1
37 38	Bengal-Nagpur—  Main line	THER T	HAN O	LD GV	ABAN			PANIE	•		89-91	1
37 38	Bengal-Nagpur—  Main line	THER	HAN O	LD GV	ABAN			PANIE	•		89·91 45·02	90-16
37 38 39	Bengal-Nagpur—  Main line	THER T	HAN O	LD GV	ARAN		Сом • •	PANIE	•			90-16
37 38 39	Bengal-Nagpur—  Main line	THER T	HAN O		ABAN		Сом •	PANIE	•			9-71
37 38 39 40	Bengal-Nagpur—  Main line	**************************************	HAN O		·	·		PANIR			45:02	90-18
37 38 39 40	Bengal-Nagpur—  Main line	THER T	CHAN O		·			PANIR		,	45:02	42.60
37 38 39 40	Bengal-Nagpur—  Main line	THER T	CHAN O	· ·	· · · · · · · · · · · · · · · · · · ·			PANIR			45·02 12·44	42.60
37 38 39 40	Bengal-Nagpur—  Main line	THER T	CHAN O	· · ·	ABAN			PANIB		,	45·02 12·44	42·60
37 38 39 40 41	Bengal-Nagpur—  Main line	THER T	CHAN O					PANIB			45·02 12 44 2·18	90·18
37 38 39 40 41 42	Bengal-Nagpur—  Main line	THER T									45·02 12·44 2·18 7·74 2·82	42·60 24·91 4·55
37 38 39 40 41 42	Bengal-Nagpur—  Main line		Tota		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		·	·		45·02 12·44 2·18	42·60 24·91 4·55
37 38 39 40 41 42	Bengal-Nagpur—  Main line		Tota		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		·	·		45·02 12·44 2·18 7·74 2·82	42·60 24·91 4·55
37 38 39 40 41 42 43 44	Bengal-Nagpur—  Main line	INE CO	Tota	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	ompar TEE.	ies		45·02 12·44 2·18 7·74 2·82	42·60 24·91 4·55 9·18

## Capital Expenditure on Railways, 1907-1908—contd.

(Figures in lakhs and decimals of lakhs.)

No.			Bally	WAY,					•		Length,	Amount of estimate or approximate cost.	Outlay to end of 1905-1906,	Grants allotted during 1906-1907.	Distribu- tion of grants during 1907-1908
	B.—CON										Milos.	Rs.	Rs.	Rs.	Rs.
	I. (i)-						CY.								
	,	Line	es in	Pro	gres <b>s.</b>										
46	Cooncor-Ootacamund	•	•	•	•	•	•	•	•		12	24.40	9:07	6.28	4.50
47	Eastern Bengal— Forbesganj-Nepal F	rontic	r								6·5	2.22	0 65	1.07	0.17
48	Golukganj-Gauhati										151	93-26	54.81	29.40	20 02
49	Katihar-Godagari										105	101.86	36.60	35.50	18:00
	Nagda-Muttra-														
5Ø	Main line	•	•	•	•	•	•	•	٠	٠	344	298-11	82:39	137.00	67:00
51	Baran-Kotah .	•	•	٠	٠.	•	•	•	•	•	<b>4</b> ()	37.59	1.07	19 00	13.00
52	North-Western- Khushalgarh-Kohat	<b>c</b> on v	ersion	าดอ	d Indi	ıs Bı	ridge				34	31.92	11-16	11-19	5.32
53	Kohat-Thal conversi										57	30 32	)		
54	Thal-Parachinar										59.6	85.22	}	4.12	2.00
55	Lodhran-Khanewal										56	45.15		7.80	   15·72
56	Loi-Shilman .										38	100.00	8.70	21.79	6.00
57	Shorket Read-Chich	oki									* 131	81.34		4.45	17.28
58	Quetta-Nushki .										83	90.06	85.12	2.46	
	•							Тот	'AL			10,24 45	289.57	280 66	169 01
	I. (i1)—Sta	rr. b	Y Ag	ENCY	OF C	омр	ANIE	s.							
	` '	-			gross.									! !	
59	Assam Bengal— Akhaura-Bhairab Ba				•						19	14.30	1.79	1.84	4.05
60	Kalaura-Khooseara										16	7.80		0.29	4.08
	Bengal and North-West	orn-	-												
61	Tirhoot extensions										209	117:43	92.96	23.50	10.38
	Burma-														2000
62	Daga Loop .	•	•	•	•	•	• .	•	•		66	40.05	•••	]	6.00
63	Henzada-Kyangin	•	•	٠	•	•	•	•	•	•	66	54.59	18.64	52.82	3.45
61	Pegu-Moulmoin.	•	•	•	•	•	•	•	•		122	112 88	65.65	J	21.05
65	East Indian— Bhagalpur-Bausi										31	23:31	1.87	3.00	
66	Gya-Hariharpur										100	144.69	•	C 15:00	1
67	Hariharpur-Barakar										48	74:54	<b>}</b> 192 16	600	
68	Hooghly-Katwa .										65	58.46	1.45	5.00	37.73
69	Khurja-Hapur .						-	•			39	25.98	13.19		1 31.13
70	Katwa-Barharwa				•		•	•	•		103	86.87		14.00	
71	Ondal-Sainthia .		•				-	•	•		45	43.55	 37·15	0.70	
••	Great Indian Peninsula	_	-	•	•	•	•	•	•	•	ريو	49.00	37.10	6.20	J
72	Harbour Branch	•	•	•	•	•	•	•			8	45.61	6.98	8.67	9.77
78	Warora-Bellarpur	•	•	,	•	•	•	•	•		88	81.94	16:07	14.13	1 50
	Ì						Car	ried (	over			881.50	447.91	151.15	101.02

## Capital Expenditure on railways, 1907-1908—contd.

(Figures in laklıs and decimals of laklıs.)

	1												
N o.		Ra	llway.	•			•		Length.	Amount of cutimate or approximate cost.	Outlay to end of 1905-1906,	Grants allotted during 1906-1907.	Distribu tion of grants during 1907 -1909
					В	rongl	t forwa	ırd	Miles.	Rs. 881·50	Rs. 447:91	Rs. 151·15	Rs.
	B.—CONS	TRUCT	ION C	F L	NES	-cor	rold.						
	I. (ii)—State, by Agency of Companies—concld.												İ
	Lines in Progress—coneld.										,		
	Madras-		•								,		
74	Azhikal-Mangalo	ore .		•	•	•	•	•	. 77	129:05	100-21	20.30	3-49
	Southern Mahratta-									5			
75	Dhone-Kurnool (	section o	f Hyd	oraba	l-Gu	ataka	l, No. 5	8)	. 32	11.32	•••	1.00	4.00
	South Indian-											ĺ	
76	Rameswaram Ex	tension	•	•	•	•	•	•	12	35.19	4:90	-91	
							Tor	AL .		10,57.06	559 02	173:36	108.51
	II.—From Capital of old Guaranteed Companies.											•••	***
	GUARANTEED COMPANIES.  Lines in Progress.  Bengal-Nagpur—												
77	Gondia-Chanda		:		_				223	109:39	<b>3</b> ·33	41.61	05.70
8	Kampti-Ramtek								17	7.42		4.37	25·50 1·74
9	'Nainpur-Mandla								32	11.85	•••	1.17	5.00
0	Pench Valley .								29	16.23	8·93	2.30	0.20
1	Purulia-Ranchi								72	39.83	2.66	21.43	10.50
2	Raipur-Vizzanagra	m.	•		٠				311	250 42	•••	7:37	1000
							Тота	L.		435-14	14-92	78.25	33-24
	IVFROM CAPITAL OF BRANCH LINE COMPANIES WITH FIRM GUARANTES.									*			
		VFROM CAPITAL OF LOCAL BOARDS.											
	Lines in Progress.												
3   1	Bozwada-Mosulipatam	• •	•	•	•	•		• •	50	22.93	4.00	9.50	600
		,	•			1	<u> Potal</u>		124			14,61.16	3,50.00

### APPENDIX 40-contd.

### Capital Expenditure on railways, 1907-1908—concld.

(Figures in lakhs and decimals of lakhs.)

				•								
٥.	Railway,										Distribution 1907-	of grants for 1908,
											I	ж
	ABSTRACT BY OPEN LINES  A.—Capital for O				STRU	CTIC	N.				Rs.	Rs.
	I. (i) State, by State agency	I.R.V		NES.							470-59	
	I. (ii) State, by agency of Companies		•		•	Ī					334 15	
	II. Old Guaranteed Companies			·	·	•					27·10	
	III. Other Companies		•	•	•	•	•	i			181.10	
	IV. Branch Line Companies		•		•	•	•		•		0.30	
			•	•	· Та	TAT.	Opv	n Li	N 20			
٠	B.—CAPITAL FOR LINES IN PRO	ממר	Tee	a N D				D 141				10,13.2
	I. (i) State, by State Agency	•	•		•			•	•	$\cdot$	169.01	
	I. (ii) State, by agency of Companies	•		•			•	•	•	-	108.51	
	11. Old Guaranteed Companies		•		•							
	III. Other Companies			•	•			•	•		53•24	
	IV. Branch Line Companies			•								
	V. Local Boards			•	•	•					6.00	
	Total Li	NES	IN	Рво	en I I I	AND	КE	w Lı	nrs			336.7
	,					G RA	AND	TOT	'AL		[-	13,50.0
	ABSTRACT SHOWING DISTE	RIB.	UTI	ON I	BY FU	JND	S.	,		l	-	
	(i) State, by State agency .	. {		-	Lines		•	٠	•	-	470.59	
	I.—From	(	<i>(b)</i>	Cons	tructio	11	•	•			169 01	
	Imperial { Funds.							Tota	l (i)			639.6
	(ii) State, by agency of Companies	{		-	Lines		•	•	•		334-15	
	( )	(	(b)	Cons	tructio	n	•	•	•	•	108-51	
								Total	(ii)			442.6
	,							Тота	l 1.			10,82.2
	IIFrom Capital of old Guaranteed Companies	. {	(a)	Oper	Line	٠.	•	•	•		27·10	
			(b)	Cons	tructio	)D	•	•	•			4
							!	Total	. II			27·1
	III From Capital of Companies other than old	d §	(a)	Oper	<b>L</b> ine	в.	•	•	•		181·10	
	Guaranteed Companies.	l	<b>(b)</b>	Cons	tructio	Œ	•	•			53.24	
,	,					•	1	'OTAL	Ш	•		234.3
•	IVFrom Capital of Branch Line Companie	s <b>{</b>	(a)	Oper	Line	s .	•	•	•		0.30	
	with firm Guarantoe.	L	(b)	Cons	truotio	n	•		•			
	*						7	[otai	. 17			0.3
	V.—From Capital of Local Boards	.5	(a)	Oper	Line	8.	•	•	•	•		
	The same different of motions and the same of the same	Ί	<b>(b)</b>	Cons	tructio	a	•	•			6.00	
								Tota	l V			6.0
	TOTAL 1 TO V	5	(a)	Oper	Line	٠.	•	•			10,13.24	•
1	AGIAL 1 TO V	.5	(6)	Cons	tructio	on.	•				336-76	
	<b>k</b>					GR.	AND	TOT	'AL		18,50-00	18,50 (

# APPENDIX 40-contd.

# STATEMENT B.

Statement showing proposed lines which are under negotiation for construction by private Companies.

			İ			
٧o.	Name of Bailway,	Length.	Fatimated cost.			
	Bombay-	Miles.	Rs.			
1	Dholka-Dhandhuka-Ranpur	• 58	Not stated.			
2	Idar Road to Bramhakhed	32	Do.			
3	Mirpur Khas-Jhudo	46	(a)			
	Bombay and Hyderubad (Nızam's)—			•		
4	Tadwale to Latur	37	Not stated.			
	Eustern Bengal and Assam-					
5	Mymensingh vid Netrokona to Bara-Ari, with branch from Shambhuganj to Gauvipur	36	<b>22,16,</b> 000			
6	Singhjoni vid Sherpur to Nali-					
7	Sirajganj-Ullapara	25	12,39,000			
•	ыға <u>дан</u> у-Онараға	18	11,00,000			
	Madras				.*	
8	Tinnevelly-Tiruchendur	38	20,52,000			•
	Punjab—					
9	Rawalpindi-Murree, with extensions to Kuldana and Gharial	40	36,89,000			
	Punjab and Rajputana—				,	
,	Borawar-Hissar	186	83,07,790			

<sup>(</sup>a) £55,000 (or Rs. 8,25,000 at Rs. 15=£1) is proposed to be raised for the construction of this line.

APPENDIX 40—contd.
STATEMENT C.
Memorandum on the Construction of Railways.

(i) North Western (a) 3,269 as 3,93185 the J Open Onth and Bohilkhaud (b) 1,165 05 Open (b) 1,165 05 Open (b) 1,165 05 Open (c) 1,2581 Segretary (c) 1,2581	the commencement of 1906-07, i.e., or st April 1906, the total length of railways for traffic was 28,611.07 miles, made up as ws:—  "gauge— (i) State lines worked by the State (ii) State lines worked by companies 7,363-02 (iii) Companies' lines guaranteed by Government under the old contracts (iv) Companies' lines guaranteed by Government ander modern contracts (v) Branch line companies' railways assisted by Government under "Robate" terms (vi) Assisted companies' lines—  A. Subsidized by the Government of India 162-36 (iii) Reserving land only from Government 122-23 (vii) Native State lines—  A. Worked by companies B. Worked by State railways agency 20169 213-02 15,142-60
(i) North Western (ii) North Western (iv) North Wes	Lst April 1906, the total length of railways for traffic was 28,611.07 miles, made up as ws:  'gauge— (i) State lines worked by the State (ii) State lines worked by companies (iii) Companies' lines guaranteed by Government under the old contracts (iv) Companies' lines guaranteed by Government under modern contracts (v) Branch line companies' railways assisted by Government under "Robate" terms  A. Subsidized by the Government of India B. Receiving land only from Government  (vii) Native State lines—  A. Worked by companies B. Worked by State railways agency  20169  913 02
Cond and Bohilkhand   Colored   Co	for traffic was 28,611.07 miles, made up as ws:—  "gauge— (i) State lines worked by the State (ii) State lines worked by companies (iii) Companies' lines guaranteed by Government under the old contracts (iv) Companies' lines guaranteed by Government nader modern contracts (v) Branch line companies' railways assisted by Government under 'Robate' terms
Agra-Delhi Chord (c)   128'81   168'80   168'8	ws:—  'gauge—  (i) State lines worked by the State (ii) State lines worked by companies (iii) Companies' lines guaranteed by Government under the old contracts (iv) Companies' lines guaranteed by Government nader modern contracts (v) Branch line companies' railways assisted by Government under  'Robate' terms  A. Subsidized by the Government of India B. Reseiving land only from Government  A. Worked by companies B. Worked by State railways agency
Berwala Extension (d)   2008   1211   1   1   1   1   1   1   1   1	(i) State lines worked by the State (ii) State lines worked by companies (iii) Companies' lines guaranteed by Government under the old contracts (iv) Companies' lines guaranteed by Government under modern contracts (v) Brauch line companies' railways assisted by Government under "Robate" terms (vi) Assisted companies' lines  A. Subsidized by the Government of India B. Receiving land only from Government (vii) Native State lines  A. Worked by companies B. Worked by State railways 20169  913 02
(ii) Bombay, Baroda and Central India  (iii) Bombay, Baroda and Central India  Godbra-Rutham-Nagdia (f)  Great Indian Midiaud (c)  Indian Midiaud (c)  (iv) Indian Midiaud (c)  (iv) Indian Midiaud (c)  Southern Punjah (t)  Southern Punjah (t)  (v) Southern Punjah (t)  (vi) Southern Punjah (t)  (vi) Robithern Punjah (t)  (vii) B. Torkesaur (j)  (vii) B. Torkesaur (j)  (vii) B. Torkesaur (j)  (iv) Indian Indian Indian Extension (c)  (iv) Indian Indi	(iii) State lines worked by companies 7,363 02 (iiii) Companies' lines guaranteed by Government under the old contracts .  (iv) Companies' lines guaranteed by Government under modern contracts .  (v) Branch line companies' railways assisted by Government under 'Robate' terms .  (vi) Assisted companies' lines — Miles.  A. Subsidized by the Government of India .  B. Receiving land only from Government .  22-23  (vii) Native State lines — .  A. Worked by companies .  B. Worked by State railways agency .  201-69  913 02
Goddra-Ruthinn-Sagina f   141-14   Great Indian Feetinalis   1,881-23   1,9	(iii) Companies' lines guaranteed by Government under the old contracts (iv) Companies' lines guaranteed by Government under modern contracts (v) Branch line companies' railways assisted by Government under "Robate" terms
Indian Midlaud (c)   609-66     Madras (North-East line) (g)   (h) 497-10     (iii)   Madras (North-East line) (g)   (h) 497-10     (iv)   Hardwar-Debra (r)   72.76     Southern Panjab (t)   425-33     Southern Panjab (t)   165-60     Tapit Valley (f)   165-60     (vi) {A. Delha-Umballa-Kalka (f)   165-60     (vi) {A. Delha-Umballa-Kalka (f)   122-33     (flhopal-Itarsi (Native State section) (c)   44-22     (flhopal-Itarsi (Native State section) (c)   44-22     (flhopal-Itarsi (Native State section) (c)   44-22     (flhopal-Itarsi (Native State section) (d)   13-27     (flhopal-Itarsi (f)   145-63     (kolar Gold Fields (g)   168-63     (in Nagda-Ujjain (f)   168-63     (in Nagda-Ujjain (f)   169-64     (vii) { (a Gauranteed State   169-64     Petlad-Cambay (Tarapur section) (f)   13-31     Jammu and Kashnir (Native State section) (k)   15-94     (vii) { (a Gauranteed State   169-64     (in Umpar-Bhatinda (k)   107-06     (including the British section of the Santrabari setsmion and the Ramaghat-Krishmagar and Tresta-Kurigram branches)   168-33     Daces section and the Ramaghat-Krishmagar and Tresta-Kurigram branches   168-93     (including the British section of the Santrabari setsmion and the Ramaghat-Krishmagar and Tresta-Kurigram branches   168-93     (iii) { (including the British section of the Santrabari setsmion and the Ramaghat-Krishmagar and Tresta-Kurigram branches   168-93     Daces section   169-94     (iii) { (including the British section of the Santrabari setsmion and the Ramaghat Santrabari setsmion and the Ramaghat-Krishmagar   169-94     (iii) { (ii	crament under the old contracts . 904-01 (iv) Companies' lines guaranteed by Government under modern contracts . 32-04 (v) Braudh line companies' railways assisted by Government under "Robate" terms
(iii) Madras	ernment under modern contracts (v) Branch line companies' railways assisted by Government under "Robate" terms
Couth Behar (f)   79.76   79	(vi) Brauch line companies' railways assisted by Government under "Robate" terms
Southern Funjab (Ludinain) Extension (k)   155-60     Tapit Valley (f)   165-42     (vi)   A. Delhi-Umballa-Kaika (f)   162-36     Forkessur (f)   162-36     Shopal-Ujani (e)   113-77     Binas-Goona-Baran (e)   145-63     Kolar Giold Fields (g)   098     Kolar Giold Fields (g)   34-32     Nagad-Ujain (f)   38-32     Nizam's Gauranteed State   350-14     Petlad-Cambay (Tarapur Section) (f)   12-15     Petlad-Cambay (Anand-Tarapur Section) (f)   12-15     Jammu and Kashinir (Notice State section) (k)   15-9-1     B. Ludhiana-Diari-Jakinai (k)   79-788     Raipura-Bhatinda (h)   17-768     Raipura-Bhatinda (h)   17-768     Campors-Burhai (Metre gauge link)   (i) 79-780     Eastern Bengal   Ebehar, Kaunia-Dhubri and Northern   (including the British section of the Santraburi and timeton and the Ranaphat-Krishmagar and Teesta-Kuriyean arakers)   185-93     Casam-Bengal   175-28   17-75-28     Bellary-Bayedrug (m)   33-35   17-75-28	assisted by Government under  'Robate" terms
Blun-Goom-Baran (c)   145-93	(vi) Assisted companies' lines — Miles.  A. Subsidized by the Government of India 162-36 B. Reserving land only from Government 22-23  (vii) Native State lines — A. Worked by companies B. Worked by State railway agency 201-69 913-02
Blun-Goom-Baran (c)   145-93	A. Subsidized by the Government of India 162:36 B. Reserving land only from Government 22:23  (vii) Native State lines—  A. Worked by companies B. Worked by State railway agency 201:69  913:02
Blun-Goom-Baran (c)   145-93	A. Subsidized by the Government of India 162-36 B. Reseiving land only from Government 22-23  (vii) Native State lines— A. Worked by companies B. Worked by State railway agency 201-69  913-02
Kolar Gold Fields (g)	B. Reseiving land only from Government . 22-23  (vii) Native State lines— A. Worked by companies B. Worked by State rail- way agency . 201-69  913 02
(vii)   Pethat-Cambay (Anabur-Tarapur section) (f)   21'50	from Government 22:23  (vii) Native State lines— A. Worked by companies B. Worked by State rail- way agency 201:69  913 02
Campore-Burhwal (Metre gauge (ink)   (1) 79'00     Enstern Bengal—   Behar, Kaunia Diubri and Northern sections     (viii) { (including the British section of the Santraburi extension and the Runaghat-Krishnagar and Trestira Kurigram branches)   086 80   3' 3     Dacca section   85'09   775 28     Bellary-Bayedrug (m)   33'35	(vii) Native State lines— A. Worked by companies 711.33 B. Worked by State railway agency 201.69 913.02
Campore-Burhwal (Metre gauge (ink)   (1) 79'00     Enstern Bengal—   Behar, Kaunia Diubri and Northern sections     (viii) { (including the British section of the Santraburi extension and the Runaghat-Krishnagar and Trestira Kurigram branches)   086 80   3' 3     Dacca section   85'09   775 28     Bellary-Bayedrug (m)   33'35	A. Worked by companies 711 33 B. Worked by State railway agency 201 69 913 02
Campore-Burhwal (Metre gauge (ink)   (1) 79'00     Enstern Bengal—   Behar, Kaunia Diubri and Northern sections     (viii) { (including the British section of the Santraburi extension and the Runaghat-Krishnagar and Trestira Kurigram branches)   086 80   3' 3     Dacca section   85'09   775 28     Bellary-Bayedrug (m)   33'35	B. Worked by State railway agency 201 69 913 02
Eastern Bengal—  (viii) {	913 02
Tereita Aurigram brancies   086 80   37 3     Daces section   85 92 3     Assum-Bougal   775 28 3     Bellary-Bayedrug (m)   33 36 5	
Teeta Auryram branches	
Assum-Bengal 775 28 Bellary-Rayedrug (m) 33 35	₹" gauge—
Burma 1 340 18	viii) State lines worked by the State . 852-38
Little Control of Marchael Control of Contro	(ix) State lines worked by companies 7,614 00 (x) District Boards' lines 99 46
Guntakal-Mysore frontier (m) 119 50 Hospet-Kottur (m) 43 06	(xi) Branch line companies' railways
Jodhpur-Hyderabad (British section) (n) 123 98   Lucknow-Harcilly (o) 237 04	assisted by Government under "Robato" terms
(is) Mysore section (Southern Mahratta) (m)	
Palanpur-Deesa (f)	(xii) Assisted companies' lines— Miles.
South Indian 1,123:05   Southern Mahiatta 1,042:04	A. Subsidized by the Gov-
Tinnevelly Quilon (Travancore) (British section) (q) . 6043 Tirboot (r) 613-20	ernment of Iudia . 109 92 B. Subsidized by Local
(e) Teniora District Board (a)	Governments 77.50
(21)	C. Subsidized by District
A. Ronnetted and Kumaon	Boards 36:40 D. Receiving land only
B. Dibru-Sudiya	from Government . 1,045-21
(21) C. Heigal-Dodars	1,269.03
(xiii) Ledo and Tikak Murgherita (t)	xiii) Unassisted companies' lines 8:50
Bhavn-gar-Gondal-Janagad-Porbandar (4) 334 19	xiv) Native State lines — A. Worked by Native
Dharangadra (r)	States 1,326.63
Jetalsar-Rujkot (v)	B. Worked by companies . 814-38
1 Udainur-Chitor	2,141.01
(xiv) { (Birut-Shimoga (m)	(xv) Lines in Foreign Territory 73.60
Hinduput (Yesvantpur-Mysore frontier) (m) 51:35	12,196:87
I Jaiput (f).	ccial (3' 6' and 3' 0") gauges— (xvi) State lines worked by the State
Mysore-Nanjangud (m)	11. 74. 11.
Timevelly United (Travancore) (Nation State	xvii) State lines worked by companies 401·25  (viii) Assisted companies' lines—
(Vijapur-Kalol-Kadi (f) 41:37)	Miles.
(14) 1 Pont of (14) (9) 73-80	A. Subsidized by Local
( Dandot Light (2' u") (4)	Governments 5876
(avi) Jornat (2' 0") 30-25 Khushalgarh-Kohat-Thal (2' 6") (4)	B. Subsidized by District
(Nowshers-Durgal (2' 6") (k)	Boards 121'60
Kalka-Simin (2' 6")   60'44   (xvii)   Morapur-Dharmapuri (2' 6") (q)   18'14   404 25	C. Receiving land only from Government . 67:43
	247.79
( Darjeeling-Himalayan (2'0"), 51:00   51:00   7:7a   58:76	(xix) Unassisted companies' lines 33.27
(Baraset-Baurhat Light (2' 6")  (Buthtfarmer-Behar Light (2' 6")	(xx) Native State lines-
Baraset-Bairhat Light (2' 0")   28'03   18'0	A. Worked by Native
( nowan-saeaknate right (2 0") 1975 (Tezpur-Bahapara Light (2 0") 20:10)	States 11.86
C. Foward Light (2' 6") (o) 27.93 39.50 67.43	B. Werked by companies . 372:42
(xix) Tarakoshwar-Magra Light (2'0') 33-27 (A. Cutch (2'0') 11:96	C. Worked by State rail- way agoncy 33.60
(Gackwar's Dabhoi (2' 6") (f)	way agoncy . 33.60 417.88
(xz) (B.   Mourbhanj (2' 6") (y)   33'-al   37.3'42   Parlakimedi Light (2' 6") (y)   24-62	1,271.60
(Rajpipla (2 4") (f)	TOTAL 28,611
(c) Includes 5:28 miles of military line not used for public traffic and 26:28 miles of mixed (5' of and 3' 3' y') game into between Bhatinds and Kot Kapurn, worked over by the North Western State and Rajmtana-Naiwa railways.  (b) Includes 1679 miles of mened (5' of and 3' 3' y') gains in between Bornwal and Bara Bauki, 0:59 mile on the Cawnpore Brigge and 1:8 mile of 3' 3' gauge inc between the Oudh and Roblithand State and 1:6 mile of 3' 3' gauge inc between the Oudh and Roblithand State and 1:6 mile of 3' 3' gauge (1) worked by the erreat indian Peninsula Railway Company.  (c) Worked by the His Highwess the Nizam's Guaranteed State Railways Company.  (e) Includes 30:28 miles of 3' 3' gauge line between Virangam and Wailwan.  (f) Worked by the Madras Railway Company.  (e) Worked by the Madras Railway Company.  (f) Worked by the Madras Railway Company.  (a) Worked by the Madras Railway Company.  (b) Includes 1'00 mile of mixed (5' d' and 3' 3'') gauge line between Beawada and Kistna Block hat and 1'07 mile of 3' 8' gauge line between Kistna Block hat and Tadepalli.  (d) Worked by the Oudh and Roblithand State railway.  (e) Worked by the Oudh and Roblithand State railway.	Daiganj, worked over, but includes 1879 miles of mixed (6' 6' and 3' 39') gauge line between Surhwai and Bara Banki and 0'5 mile of the Oudh and Rohlikhand Stateraliway on the Gawapore Sridge.  Nowked by the Southern Maharatta Ealiway Company.  Worked by the Southern Maharatta Ealiway Company.  Worked by the Bonikhund and Kumaon Railway Company.  Nowked by the Bonikhund and Kumaon Railway Company.  Nowked by the Bonikhund and Kumaon Railway Company.  Nowked by the Bonikhund and Kumaon Railway Company.  Nowked by the Bank and 0'54 mile between Labort Gate Cabin and Brewery Cabin, Dolhi, laid on the 8' 6' gauge, and 28' 28' miles of mixed (6' and 3' 3') gauge line between Kot Eapura and Shatinda, worked over by the Saptens-Salway Company.  Nowled by the Salvers Bank Salway Company.  Worked by the Eastern Bang of the Westorn Baliway Company.  Worked by the Eastern Bang of the Westorn Baliway.  Worked 5' the Bankand Balway Company.  Nowled 5' the Eastern Bang of the Westorn Baliway.  Nowled 5' the Bankand Balway Company.  Nowled 5' the Balway Company.  Nowled 5' the Balway Company.  Nowled 5' the Balway Company.  Nowled 5' the Balway Company.  Nowled 5' the Balway Company.  Nowled 5' the Balway Company.  Nowled 5' the Balway Company.

### APPENDIX 40-contd.

And the mileage under constru	ation o	W 0000	-	Lines under construction and sanctioned on S1st March 1906.	, ,
tioned for construction on the san	ne dat	te, was		r Eastern Bengal-	dilos.
3,304.98 miles, as follows:—		•		Kakurgachi Chord	
	Miles.	Miles.	m)	Kotah to Baran. 40'00 383'98 Nogda to Muttra 383'98	690-66
			(1) {	Kacha Garhi to mile 23	Ma.de
<b>5</b> ' <b>6</b> " gauge—		3		Bargoda to Shorkot Boad	
(i) State lines worked by the State .	690 56			Fhaphamau to Zafarabad.   Azhikal-Mangalore   Bougal-Nagpur-	57 <b>-50</b> <b>97-27</b>
(ii) State lines worked by companies .	916-23			Bhojudh to Hariharpur . 25:64 Bhojudh to Parthadhi . 5:38 Branch ine ucar Kanoodih . 1:97	
(iii) Branch line companies' railways				Vizianagram to Raipur	
assisted by Government under "Rebate" terms	26.85			Barbarwa to Katwa	
		1,633-63		Borachuk to Sodepur 4'50 Chord line between the East Indian and Oudh and Rohilkhaud State railways	•
		-,	(ii) -	Chất line to Dhulian.	916 <b>-33</b>
	٠,9			Hooghly to Katwa	
				Mile 1701 from Howrah on the Jharla branch to Chandore . 4:16	
				Ondal to Sainthia	
				Kurla to Mazagaon	
				Madras (North-East line)— Korukkuppettal to Basin Bridge . 2 085 Salem-Attur (b) . 38'06 J	
			(111)	Amritent Patti	26.85
		•	(iv)	Eastern Beugal	
				Forbesganj to the Nepal Frontier	227:37
3' 3}" gauge—				Gaulati	
(iv) State lines worked by the State	227 3			Kalaura to the Khooseara river 16'00 5	
(v) State lines worked by companies .	425.38			Themsing to Malagaon 6.70 Burma Extensions — 65.66 Henrada to Kyangin 65.66 186.93	
(vi) District Boards' lines	49.50		<b>(</b> v)	Nilgiri - Coonsor to Ootseamund	425-38
(vii) Assisted companies' lines-				South Indian— Maudapam to Baneswaram Temple . 10:13   Tangachumadam to Port Ampthill . 1:71   20:83   Truppachettai to Sivagauga	
Miles.  A. Subsidized by the Gov-				Tirboot Bairagnia-Narkatisganj	
criment of India . 92°00  B. Subsidized by local				Mansi to Bhaptiahi	
Governments 8.50 C. Receiving land only			(vi)	(A. Rohilkund and Kumaon-	4.20
from Government . 95.28	193.73		(vii)	Lalkus to Kashipur 45'00 \ Moradabad to Kamuagar 47'00 \ R Dibru-Sadiva—	93.00
(viii) Native State lines worked by com-				B. Dibrig-Bodiya-  Talap to Sakhoa Ghat  C. Bongal and North-Western—  Dharonds to Maharajgan  300)	8.20
panics . ,	82.78	980.76		Gainsari to Jarwa	95-23
				Chansama to Bechraji	
			(viii)	Manund Road to Harij	62:78
				Sangli—Miraj to Sangli Town	
Special (2' 6" and 2' 0") gauges—	0.50			,	
(ix) State lines worked by the State. (x) State lines worked by companies	6·80 329·66				
(xi) Assisted companies' lines—			(ia)	Jullundur Kapurthala-Sultanpur (British section) (c)— Jullundur to the British Frontier  (Gondia-Ahanda (2) 69 1—	6.80
A. Subsidized by District Boards 12.50				rendia to Chanda 146.66 213.40 Pauni (Brahmapuri) to Nagpur 63.75	
B. Receiving land only from Government . 208:32			(x)	Khireadoh to Birgora 7.76 44.08	329-66
(xii) Native State lines-	220.82			Nainpur to Mandla	
A. Worked by Native States 44.63				Autpur to Champadanga (b)	18-50
B. Worked by companies . 66 66 C. Worked by State rail-			(zi)	Kuslamb to Tadwale 20 36 51.03	•
way agency 22.02	138-31			Dwara-Therria Light (2' 6")   Dwara to Maclong (d)	208732
		690-59		Matherau (2'0")— Noral to Matherau Shahdara (Dolbi)-Saharappur Light (2' 6")—	
Tora	AL .	3,304.98		Baraut to Meerut	
There was thus a grand total of				Cutch (2' 6')— Anjar to Bhuj  Dhotpur-Bart (3' 6'')  1925	44.63
pleted and in hand, on the 1st			(Tii)	B. Gwallor Light (2' 0")— Babalgarh to Shiupur C. Jullundur-Kapurt in a Sultanpur (Native State section)—	66-66
miles	. 3.	1,916.05		Sultanpur to the British Frontier (c)	22:03

<sup>(</sup>a) Constructed but not worked.
(b) Commencement of work not authorised and question of gauge not flushly settled.
(c) Commencement of work not authorised and question of gauge not flushly settled.

		AP	PENI	OIX 4	10—contd.		
	New Lines authorized.	Miles,	Miles.	Miles.	During 1906-1907, i.e., from 1 to the 31st March 1907, 520-20	miles o	of new
(I)	North Wostern— Shorkot Road to Chichoki Thal to Parachunar Oudh and Robilkhand— Islamau to Sitapur Rosa to Situpur	. 180.80 }59 60 }37.12 }51.36 }	190:40	278-88	railway have been authorized as fol	llows :-	,
(11)	Bengal-Nagpur— Kanuptee to Ramtek Kandri branch Sini to Gurunnlahini East Indian— Toposi to Baraboni	· 14.74 2-53 44.00	61·27 }	70-58	, 5' 6" gauge—  (i) State lines worked by the State  (ii) State lines worked by companies .	Miles. 278.88 70.58	Miles.
				,	•	-	349-46
	Burma— Nikhen to Begayet Hospet-Kottur— Banandrug Junction to Bamenamalai Kurnool Boad-Kurnool Bougal and North-Wostern—		66°25 4°98 32°00	108 21	3' 38" gauge—  (iii) State lines worked by companies  (iv) Assisted companies' lines receiving land only from Government  (v) Native State lines worked by companies	103·21 69·80 7·73	
<i>(-1</i> )	Burhwal to Sitapur		• •	59.80			170.74
(₹)	Gackwar's Mebanna— Kheratu to Dubhora			7 73	Tor		520.20
	Lunes opened or likely to be op						
(vi)	Esstern Bengal — Kakurgachi Chord North Western— Shahdara to Sangla Shorko Road to Sargoda Oudh and Bohilthand— Phaphamu to Zafarabad	. *55:50 } . 103:14 }	2:25] 168:64 } *83 (K)	219:07	And 951.84 miles have been, or be, opened to public traffic as follow		cel <b>y to</b>
	Ashikal-Mangalore . Bengal-Nagpur Bhojudih to Gomoh (Hariharpur) .	25.043	77.27		5' 6" gange—	Miles.	Miles.
	Branch line near Khanoodih  East Indiau  Khurja to Hapur	1.97 } . 37'87 \	27.61		(vi) State lines worked by the State .	219.07	
(vii)	Manpur to Dhaubaid. Tatulmari (Nagri) to Kasuuda Ondal to Saiuthia	1 50 445 706	207-50	350-91	(vii) State lines worked by companies ,	<b>3</b> 50·91	
	Great Indiau Peninsula— Warora to Beltarpur , Madras (Korth: East line)— Korrukkuppetiai to Basin Bridge ,		97·59 0 85 J		(viii) Branch line companies' railways assisted by Government under "Rebate" terms	27 49	
(vi!l)	Amritear-Patti			*27*49			59 <b>7·47</b>
	and the second s				3' 3}" gauge—		
	Hospet-Kottur— Ramandrug Junction to Ramanamalai . South Indian —	•	4.96		(ix) State lines worked by companies .	174 56	
(iz)	Pamban beach to Rameswaram Tirhoot— Balragnia to Narkatinganj	 58 05 )	6:45 ]	171 66	(x) District Board's l'nes ,	3 90	
	Mansi to Baptishi Narkatlaganj to Bagaha Saharsa to Murliganj	60 37 ( •26·62 ( 18·61 )	162-65		(xi) Branch line companies railways assisted by Government under "Rebate" tems	2.53	
	Tanjore District Board Arantang: Quarry Branch (a)			3.80	(xii) Assisted companies' lines receiving land only from Government .	92 14	;
(zi)	Mymensingh-Jamalpur Jagannathganj — New line laid at Jagannathganj (a)			2.53	(xiii) Native State lines worked by com- panies	4 44	
( <b>xii</b> )	Bengal and North-Western— Dharonda to Maharajganj Gainsari to Jarwa Gorah pur to Hagaba Savan to Thawe	: : :	3°90 9 47 60 94 17 83	92-14			277•67
(zili)	Sangli			*4:44	Special (2' 6" and 2' 0") gauges-		
	Mirsj to Sangil		• •	3 27	(xiv) State lines worked by companies .	13.62	
(	Jubbulpur-Gondis Extension (2'0")— Khirsadoh to Barkuhi	. 6 m )		.,	(xv) Assisted companies' lines receiving land only from Government .	63·18	
(xîv)	Khirsadoh to turkum Khirsadoh to Sirgora Raipur-Dhamtari (2'6")— Rajim to Rajim Town (a)	. 778} 	0.78	13.63	•		76:80
(27)	Barsi Light (2' 6")— Barsi Boad Junction to Pandharpur Kuslamb to Tadwale  Matheran (2' 0")	**30-21 } 20*36 }	50·57 •12·61	63-18	To	OTAL .	951:84
	Correction of milesge.				_		

Correction of mileage.
 (a) These lines are not shown as under construction at the beginning of the year as no intimation was received of their being under construction.

APPEND	X 40-contd.	
The total length of open line at the commence-	Open lines on 1st April 1907.	Miles. Miles
ent of 1907-1908, i.e., on the 1st April 1907	(Enstern Benga)	(a) 3.427 40 > 6.180 405
ill, therefore, be 29,571.32† miles, comprising	Oudh and Bubilkhand .	(b) 1,239 28 5 125 90 7
5' 6" gauge- Miles. Miles.	Azhikul-Mangalore (d) Bengul-Nagpur Bowada astendon (a)	* 1,710 63
(i) State lines worked by the State 5.150.92 (ii) State lines worked by companies . 7,720.15	Berwarda extension (a) Bropal l'arai (Brivia Sertion) (a) (ii) tomis:, Baroda and Central Ludia Fost Ind an coultra Rulam-Nagda (y)	20 58 13 11 (f) 504 25 > 7.73015
(iii) Companies' lines guaranteed by	Rost Ind an Godhra-Rutlam-Nagda (y) Great Indian Peniusula	( f ) 504 35 } 7,720 15 2,200 90 f 141 14
tracts 904:01	Indian Midland (et	1,599 22 909 58 (A) 498 04
(iv) Companies' lines guaranteed by Government under modern con-	(iii) Madras (iv) Hardwar-belna (i) (Amrii-sar-Patii (j)	904-01
tiacis	( outh Behar (k)	27 48 7 78 76 423 33 5 543 11 1
(v) Branch line companies' railways assisted by Government under	Bouthern Paujah (Ludhiana) Extension (j) (Tapit Vulley (s) (vi) A. D. thi-Umballa-Korka (k) (vi) B. Tarkessur (k)	186 08 1
"Rebate" terms 842 11 (vi) Assisted companies' lines—		163:30 23 68:
Mics.	Dispin-ture (Native State Section) (e)     Bispin-ture   Ujudin (c)     Bissid-Ujudin (c)     Bissid-Ujudin (d)     A.   Nagda-Ujudin (g)     A.	119 27 146 63
A, Subsidized by the Gov- ernment of India . 162 36		31-31 711-88 330-14
B. Receiving land only from Government . 22 23	(vii) Petlad Cambay (Anand-Tarapur section (g) Petlad-Cambay (Iarapur-Cambay section) (g)	\$1.50 j
(vii) Native State lines—	Jaun.u and Kushmir (Native State section) (j)  B. { udmana Dhori-Jakhal (j) }  Knjpura-Bhatinda (j)	78 66 201 69
A. Worked by companies 711'32	Campore Buchwal (Metre gauge link)	(1) 79 00}
B. Worked by State rail- way agency 201-69	Behar, Kauria-Dhuhri and Northern section (viil) ( corelating the British section of the Sastrabasi extension and the Rinaghat-Krubnagar and	} 852·94
——————————————————————————————————————	Teesta Kuruyram branches Daren section	9 687 42 85 92
3' 3{ gauge-	Assau Fengal Hellary Rajadrug (m) Burum	775 26 93 86 1,340 16
(ix) State lines worked by companies . 7,781 52	Burus Gustakul-Mysoro froutier (m) Ho pet-Kottur (m) Jodhpur-Hy-Grabad Bestish section (n)	119 50 46:02
(x) District Boards' lines	Iodhpur-Hy &rahad Brilleh acetton (n) Lukhow-Bacelly to) (ix) Aywore section (vouthern Mahrutta) (m)	128-98 237 04
assisted by Government under "Rebate" terms. 141:42	(ix) { Nyson section (Southern Manratta) (a)   New risk (d)   ralenpur-Dosen (q)   Rajputann-Malwa (g)	296 23 7,781*58 16 99 17 28
(xii) Assisted companies' lines-	I South Indian	(p) 1,774 36 1,13 : 00
Miles. A. Subsidized by the Gov-	Fout ern Mahratta Timeevelle-Quilou (Travancore) (British section) (q) Tirhoot (p)	1,048.04 #0.48 *770.53
ernment of India 117.87  B. Subsidized by local	i Tirhoot () (x) Tanfore District Board (q) (Alem Labort District Board (g)	33.50
Governments 77:50 C. Sabsidized by District	(xi) Ahmedabad-Peranti (q)  Mynenshigh Jamahur Jegannathgani (s)  A. Rohikand and Kumaon	53'24) 161'43 53'24) 117 87
Boards 36:40	IR Dibra-Sadiva	77.50 96.40
D. Receiving land only from Government 1,137.42	D. Bengal Dooars Extensions	116 56 } 1,137-49
(xiii) Unassisted companies lines . 8:50	(Mil) Ledo a d'Ikak-Margherita (f. (1) Ledo a d'Ikak-Margherita (f. (1) viogar-bondal-Jonagad-Porbundar (1) Bikmer	(a) 334 10 241 35
(xiv) Native State lines-	Dhrangadra (v)	20 63 (w) 51 28
A. Worked by Native	(A. ] deinkar-Kajkot (v)	46 31
States 1,326.63 B. Worked by companies 818.82	Marvi   Udaipur Chitor	(#)94 64 [ 67:50 ] 37 63 ]
(xv) Lines in Foreign Territory	(xiv) ( Guckwar's Mcheana (g) Hundupar (Year intpur-Mysere frontier) (m)	99 63 51 95 391 79
12,475 98	Hyderabude oddavari Valley (c). Jamu (q) Kolhatur (m)	391:13 22:18 29:27 [
pecial (2' 6" and 2' 0") gauges.  (xvi) State lines worked by the State . 227.85"	(B. 1 Singli (m)	15 90 > 618 Rg
(xviii) State lines worked by companies . 358.74 (xviii) Assisted companies' lines—	Shoranur-Cochiu (di Time velly-Quilen (Travancore) Nation State vector) (1)	04 75
Miles.  A. Subsidized by Local	(Vojapur-Kalol-Kadi (g)	41 37 j 14 08 j
Governments . 58.76	(xv) S Conditionerry (p)	7 55 73'60 51 10 7
B. Subsidized by District  Boards 121 60	(1) and 1 Light (2'0') (j)  (1) archat (2'0')  (xy) { Kylka-Simble (2'0') (j)  (xy) { Kylka-Simble (2'0') (j)	30 25   F9 41 } 227 85
C. Receiving land only from Government . 130 61	(xy) { Kilka-simin (2 'o') (j) (Khushalgath-Kohat-Hed (2' 0'') (j) (Nowshen-Durgul (2' 0'') (j) (Juhhalp restoudus Extension (2' 0'') (y)	9. 73 1 40 25 )
(xix) Unassisted companies' lines . 310.97		257 89 ) *** *18 53 } 358*74
(xx) Native State lines-	Kaika Suda (2' 6")   xvii { Morapeur Dharmaperi (2' 4") (d)     Kaipeur Dhamtari (.' 6") (v)     Trupattur-Krishoagiri (2' 6") (d)     Cherledour Hundsyn (2' 6")	*56 94 ( 26 39 )
Miles. A. Worked by Native	A. Thatan-Dayiazak (2'6") (Barasot-Basirbat Light (2'6")	51 00 } 58.78 7 70 } 58.78
States	Bukhttarpur-benar Light (2' 6')	19 50   97:10 } 121:00 19 75
C. Worked by State rail- way agency . 33.60	Texpur-Balipara Light (2" 6")  Charst Light (2" 6")	20·10) 78·50)
417.68 1,248.51	(xviii) (B. 1 (xviii) (B. 1) (Xviii) (B. 1)	39 50 )
	(xix) Tarakeantar tagina English (xix)	33 27 *94*487
TOTAL . †29,571.32	(iwalior Light 200)	35d 53 32 41 } 372'41
	(xx) { B. { Monthham (x' 0'') (y') { y' } { Y }	37·37 37·37 33·60
a) Sic toobnote (a) on page 288. a) Sec fond-note (b) on page 283. b) Warked by the livest Indian Peninsula Railway Company.	Bally av Country	, <del></del>
e) Worked by the Great Indian Peninsula Railway Company, d) Worked by the Madres Railway Company, by the Madres Railway Company, and the Madres Railway Company,	(a) Westerd by we normal state of the Board of the Company (p) ger tout-mote (p) on mag alls.  (b) Worked by the Senth India North-Western Railway Company (p) Worked by the Board Bones! State railway (t) Worked by the Assert Bones! State railway (t) Worked by the Assert Bones! State railway India to the Sentence of t	ny.
e) worken by him mignisses the Myan a Charanteed State Enlways Company. f Includes 30 38 miles of 3' 3\$" gauge line between Virangam and Wadhwan, a) Worked by the Bombay, Baroda and Central India Railway Company.	(f) Worked by the Assam Railways and Trading Company. (s) Includes 5 23 miles of Bhavnagar Bock estates and Junaga	d quarry lines.
e) Worked by the firest Indian Fennsula Raiway Company, d) Worked by the Madros Raiway Company, e) Worked by His Highness the Niam's Guaranteed State Bailways Company, f) Includes 93 miles of 3 '8' gauge line between Virangam and Wadhwan, e) Worked by the Bombay, Baroda and Central India Railway Company, See tookenote (a) on page 239 d) Worked by the Couch and Rohilkhand State railway.  Worked by the Couch and Rohilkhand State railway.	1 1- Lucia 90 50 miles of 2' 6" gange line between Vankarer a	nd Marsi.
M. Worked by the Kest Indian Railway Company.	(y) Worked by the Bengul-Nagpur Bailway Company.	detration for working
Worked by the Jodhpur-Bikaner railway Company.  Our railway Company.  Our railway.	from the lat January 1907.	
The date of the commencement of 1906-07		

# Appendix 40-contd.

Lalgola to Lalgola tibat Panchoria to the Gauges river (a) Nagda-Mattra— Kotah to Baran Nagda to Muttra					
Kotah to Baran		2.75 } 6 00 }	8 73		will be 2,873·17 miles, made up as follows:—
North Western-	:	40'00)	393.08		ACT. NATE. NATE.
Kacha Garbi to mile 23 Khushalgarh bridge and approaches	:	23:00 ) 3:63 (	}	754.83	Miles. Miles. Miles.
Lodhrau to Khanewal Shorkot Road to Chichoki Thal to Parachinar	: :	56°59 } 130 go } 6 <b>9</b> co /	273.62		5' 6" gauge  (i) State lines worked by the
Oudh and Robilkhand— Balamau to Stapur		37 12 )	8H 41		State
Bougal-Nagpur	•	-			(ii) State lines worked by com-
Kandri branch Sini to Gurumaishini	:	2 53 ( 41 00 (	3/1/89		1,390.40
East Indian-Agra direct access	•	1.737	1		-t -**
Rhagalpur to Bausi	:	31 01	İ		3' 3\geq gauge-
Chord live between the East Indian Onds and Roblikhand State rail	and ways	1	2100.15		(iii) State lines worked by the State
Ghat line to Dhulian Ghat line to Salimpara		1 0n 2 50	2.9-30 }	(37.63	(iv) State lines worked by com- panies
Mile 1704 from Howrah on the Ji	haria		- !		(v) District Boards' lines 49'47
Toposi to Baraboni Grest Indian Peningula-		*31 J	1		(vi) Assisted companies' lines-
Mahim link Salem-Attur (b)	:	1 32 }	30-06		A. Subsidized by the Government of India 84 12
Eastern Bengal— Forbesganj to the Nepal Frontier Katharto dongeri			 6 50}	997-117	B. Subsidized by Local
Kokrajhar to the Brahmaputtra river of	po∗ite	Gauhari	115-57	201 31	Governments . 8:50 C. Receiving land only
Akhaura to Ashaganj Kalaura to the Khooleara river	:	10 00 }	f 00°28		from Government . 59:80
Neikban to Begavet		66'25 }	72 95		(vii) Native State lines worked .
Burma Extensions— Henzada to Kyungin	:	651167	180.93		by companies
Kurncol Road-Kurncol		121 27 3		353.30	Special (2' 6" and 2' 0") gauges—
South Indian-	•	9:175	*11:75		(vi.i) State lines worked by the
Tanguchimidam to Port Ampthill Tiruppochetial to Sivagunga	:	901	1,088		State 6.80
Bhaga'pur Kachery to Bhagalpur .			ر 79 0		(ix) State line worked by companies
	•		• •	•49 47	(x) Assisted companies' lines—
Laikua to Kashipur Moradabad to Kamnagar	:	: :	*36 43 17 69	84.13	A. Subsidized by District
Talap to Saikhoa Ghat				8:50	Boards 12:00
	•			89 80	B. Receiving land only from Government . 144-50
Chausama to Bechroji Kheralu to Dubbora	:	16 71 }	15:81)		157·00
Jalpur - Nuwai to Siwai Madhopur			•10.65	88 19	(xi) Native State lines-
Inthodur Karonth Lesightanour Bertel certica					A. Worked by Native
Juliandar to the British frontier.	.,,,,,,			68)	States 44'63
Gouda to Chanda (b)	:	149:65 }	212:40		B. Worked by companies . 66:39 C. Worked by State rail-
Jabbalpore-Gondia Extension (2' 0") - Namour to Mandla			32 14 1 72:28 /	310.83	way agency . 22.02
A Howrah-Amta Light (2' 0")	•	•	.= =		613.60
Autour to Champadanga (b)	:	: :	9:00 t	12.50	TOTAL . 2,873 <sup>-1</sup> 1
B. Shahdan (D. H. B. Shahdan (A)		13 50 6 10 }	19 50}		Making a grand total of railways completed
Barout to Meerut Shahdara to Saharanpur	, ,–	82 (d) ) 20.00 )	125 00	134,20	and in hand, at the commencement of 1907-1908 of miles
A. C. (ch (2' 6') - Anjar to Bhuj			25 38 2	44:03	And showing, after allowing for lines abandoned
B. Gaalior Light (3' 0")-			10-26 5		and corrections of mileage, an advance on the
C. Juilundur-Kapurthala-Suitanpur (Natire St. Suitaupur to the Uritish Frontier (c)	ate erci	tion) —		22 03	previous year of miles 528.44
(a) Constructed but not wasked. (b) toursement of work not authorized. (c) Lummencement of work not authorized a	nd au	estion of	gauge not	finally set	(d) Cumplation deferred.  * Correction of mileage.
<u>'</u>	ombie	tra ana s	n nano ar	tue negin	Miles. niag of 1906-07 21,010.05 820-20
.166	Malker	a-Mohud	a section o	of the Ben	gal-Nagpur railway
1	Khush Ra	algarh be	rige and a herto each	proaches	North-Western State
1	Net in	reste da	e to correct	neps of mi	licage 3'65 .
	Bhejne	lib-Parth	adih link	of the Be	89,440-77
	Rosa to Stiapur  Bougal-Nagpur-  Kumpice to Ramick  Kandra branch Sini to Gurunaishini Vizlanagram to Baspur  East Iudian- Lara direct access Iudian- Lara direct access Iudian- Lara direct access Iudian- Lara direct access Iudian- Lara direct access Iudian Chood Iluo helween the East Indian Ondra and Edinikhand State rail General Chood Iluo helween the East Indian Ondra and Edinikhand State rail General Chood Iluo helween the East Indian Ondra and Edinikhand State rail General Chood Iluo helween the Chood Iluo House Indian State Thomas Houghle to Katwen House to Salungura Houghle to Katwen Kurla to Mazagaen Mahim Iluo to Salungura Kalaura to Chandoru Toposi to Baraban Kalaura to the Khouseata river Rathar to Gongari Kokrajhar to the Brahmaputtra river of Assam-Bongal- Akhaura to Ashaganj Kalaura to the Khouseata river Barna- Neikhan to Begayet Thanning to walagaon Burna Extensions- Henada to Kyangin Fegato Martaban Kurneol Road-Karnool Nigiri- Conoor to Octacamund Kurneol Road-Karnool Nigiri- Conoor to Octacamund South Indian- Pertion of the Rameswaram extension Tanguchimadam to Fort Ampthili Tiruppenetrai to Sawagunga Tithoot- Bhaga pur Kachery to Ringalpur Bezwada-Masolipatam A, Rohiikund and Kurnaon- Laikua to Kashipur Bhaga pur Kachery to Ringalpur Bezwada-Masolipatam A, Rohiikund and Kurnaon- Laikua to Kashipur Gandan- Casaman to Beckreji Khrada to Indian- Samund Road to Harij Jalpur- Nawai to Sawai Madhopur  Jaluur- Jaluwai to Sawai Madhopur  Nawai to Sawai Madhopur  Jalur- Jalur- Nawai to Sawai Madhopur  Namund Road to Harij Jalpur- Auto ur to Champadanaca (b) Auto ur to Champadanaca (b) Pauni Hraha spart) to Nagpur (b) Jabbolpore-Gondla Extension (2º 0º) -  Namur to Mandla Paullia-Ranch (3' 0°)  Anjar to Bhada Paullia-Ranch (3' 0°)  Anjar to Bhada Paullia-Ranch (3' 0°)  Anjar to Bhada Paullia-Ranch (3' 0°)  A Howah-Amta Light (2' 0°)-  Anjar to Bhada  Bhadara (Delhi)-Bahamapur Light (2' 0)  Bhadara (Delhi)-Bahamapur Light (2' 0)  Anjar to Bhada  Bhadara (Delhi)-Bahamapur Light (2' 0)  Bhadara (Delhi)-Ba	Bougal-Nagnar- Kamples to Ramlek Kandro Granch Sind to Granmain hini Vizlanagram to Banpur East Indian- Azra direct access Indiany to Banei Hagaripur to Banei Hagaripur to Banei Hagaripur to Banei Hagaripur to Banei Gond Has between the East Indian and Onde and Robilikhand State railways near Moyhal Sarai Ghat dire to Dhulan Ghat hine to Selimpara Hooghly to Katwa Milo 1703 from Howrah on the Jharia bianch to Chandoru Topos to Baraboni Grest Indian reminent— Kurla to Mazagaca Mahim Ilak Salem-Altur (b)  Eastorn Bengal— Forbeggan to the Nepal Frontier Karthar to Goolagari Kokrajhar to the Brahmaputtra river ej posite Assam-Bengal— Akhaura to Ashaganj Kalaura to the Khooseata river Barma— Akhaura to Hangagan Henada to Kyangin Lega to Mariaban Kurnon Hadian— Henada to Kyangin Pertion of the Ramenwaram extension Tangachimadam to Port Aughthil Truppochetial to Sivagunga Tithoot— Bhaga pur Kachery to Bhagalpur Bezwada-Masulipatam A, Rohilkund and Kuranon— Latkua to Kashipur Moradabad to Kamnagar B. Dibrus-Sadia— Burhwal to Silapur Cackwar's Mehaana— Chausama to Rechraji Kheralia to Jahiora Alapur to Chanda C, Bengal and Northe-Westen— Burhwal to Silapur  Jalpur— Nawai te Siwal Madhopur  Jalumdar to Hadian- Chausama to Rechraji Kheralia to Jahiora Alapur to Chanda (2)  Anipur to Chanda (3)  Anipur to Chanda (4) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Mandla  Panulia-Banchi (2'0")— Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Changadana (b) Anipur to Mandla Bhadeara (Peliki-Sainaranpur (Natice State see Sultanpur to the Uritish Frontier (c)  (c) Constructement of work not anthorized (d)  Condinancement of work not an	Bongal-Nagpur- Kampter to Ramick	Rosa to Stiapur	Rosa to Stapur   613.0   603   603

# The state of the s Appendix 40—concld.

It is expected that the follon infinished line will be opened for			(1) ?	Laigola to Lalgola Ghat Nagda-Muttra— Nagda to Kotah		138-80	1649
907-1908 :—	-	•	·" (	North Western- Khushalgarh bridge and approaches .		8:63	
67 agyget-	Miles.	Miles.	ا	Bengal-Nagpur— Kamptos to Ramtek	. 1474)	17'27	
6" gauges—			(ii)	Kandri branch East Indian— Agra direct access	. 2.635	1.75	26.8
(i) State lines worked by the State	144.88	*	į.	Great Indian Pentosula— Kurin to Mazagaon	. 6.577	1	
(ii) State lines worked by com-	26.85	•	(	Mahim link	. 1.32 }	7.83	
		171.73	a \$	Eastern Bengal-			
31 gauge-			(iii) {	Forbesganj to the Nopal Frontier Kokrajhar to Bijni	: :	6 50 } 29 50 }	36 €
(iii) State lines worked by the States	. • . 36.00		1	Assam-Hengai — Ak haura to Ashuganj		10.00	
(iv) State lines worked by com-			(iv)	Burma Extensions — Housada to Kyangin Pegu to Martaban	. 65·66 }	186 93 >	2174
panies	217.68		l l	Nilgiri-Coonoor to Ootacamund	Latery	11.75	
(v) District Boards' lines	. , 40 41			Bezwada-Masulipatam			49*1
(vi) Assisted companies' lines sub- sidized by the Government of	04.10		(vi) {	Bohikund and Kumaon— Laikua to Kashipur		86:43 }	84-
India	84·12		(	Moradabad to Kammagar		47 69 5	
(vii) Native State lines worked by companies	86.49		(vii) {	Chansama to Bechruit Keralu to Dabbora	16.74 7.79	> 4564)	
•		473.76		Manuad Road to Harij Jaipur- Nawai to Siwai Madhopur	. 21.37	40.65	881
pecial (2' 6" and 2' 0") gauges—	72 28			Name to civili nguiopur	• •	10 007	
(viii) State lines worked by companies (ix) Assisted companies' lines receiving	g land		(viii) (ix)	Purulia-Ranchi (2' 6") Shahdara (Delhi) Saharanpur Light (2' 6",	• .		72
only from Government .  (x) Native State lines worked by	. , 93.00			Shahdara to Sahuranpur Dholpur-Bari (2' 6")—	: :	: • :	95 19
States	19-25	190.50		Enstern Bergal-			
		186.53	i	Panchooria to the Ganges river (a) . Nagda-Mutira		. 6.00.	
TOT	AL .	832.02	i	Kotah to Buttra	40°00° 205°48°	245-48	
			(xi) {	North Western— Kacha Garbi to mile 23	. 23:00	, I	
Leaving the undermentione	d lines for c	ombre.		Lodhran to Khanewal  Bhorkot Read to Chichoki  That to Parachinar	130 80	280.88 J	- 009
on in 1903-1909 or later:—			j	Oudh and Robilkhand— Balaman to Sitapur	. 50·60,	、 I	
, ,	Miles. Miles.	Miles.	į	Bosa to Sitapur	51:36		
6 gauge			į	Rengal-Nagpur Sici to Gurumaishini	44.00		١
(xi) State lines worked by the	. 609.95			Vizinnagram to Raipur East Indian-	310.03	' !	1
State	. 00330	,		Barbarwa to Kutwa Bhagaipur to Bausi	99 14	í !	
(xii) State lines worked by com-	. 608-78		(xil) 4	Romobuck to Sedepur  Chard lin between the East Indian and Oudh and Robukhand State Russawa	. <b>≴</b> .5∪	i	
•	•	1,21873	<b></b> ,	Oudh and Robitkhand State Railways near Mochal Surai Chat line to Dhohan	. 1'19	218-10	} 60%' }
3%" gauge— (xiii) State lines worked by the				Ghat line to Sajimpara Houghly to Katwa	85·20	1	
State ,	. 191.37	•		Mile 1704 from Howalt on the Jharis branch to Chandore	. 4.14		1
(xiv) State lines worked by com-	105.46			Toposi to Barabosi	. 931	. 36.06	;
panies	. 135.65	:		Paston Boycel			
(xv) Assisted companies' lines-			(1111)	Bijui to the Brahmaputia river opposite ( Kathiar to Godagari	3auhati	. 80'37 ) . 106'00	
A. Subsidized by Local Gov-	8·5 <b>0</b>			(Assam-Bengal—	• •		,
ornments	000			Kalaura to the Khooseara river		. 16-00	ì
B. Receiving land only from Government	59-80			Neikban to Reg syst Thansaing to Malagaon	. 66.28 . 670	5 1200	! !
4	68 30	) - 395 29	(xiv)	Kurnool Road Kurnool  South Indian— Portion of the Rameswaram extension		. 33·00	138
pecial (2' 6" and 2' 0") gauges—				Tangachimadam to Port Ampihili Tiruppachettai to Siyagunga	171		l
(xvi) State lines worked by the	6.80	)		Tirboot— Bhagalpur-Kachery to Bhagalpur		. 0.79.	•
State (xvii) State lines worked by com-	, , , ,	-	(	A Dibru-Sadys-			_
panies	. 244.5		(xv)	Talap to Saikhoa Ghat B. l'engal and North-Western— Burhwal to Sitapur			. 69
(xviii) Assisted companies' lines							
A. Subsidized by District Boards	12.50		(271)	Juliandur-Kapurthala-Sultaupur (British section Juliandur to the British Frontier (c) .			. 6
B. Receiving land only from			۹.	(Goudia-Chanda (2' 6")— Goudia to Chanda (5)	. 148.65		
Government	49'50 62'00	)	(avii)	Prout (Bishmapuri) to Nagpur (*)  [ Jubbulpur-Gondia Extension (2' 6')—	63 75		} { £4i
(xix) Native State lines-	<b>33</b> 00			Nainpur to Mandla		. 30-14,	)
A. Worked by Native States .	25 39			(A. Howral, Amia Light (2'0')— Autpur to Chemindanga (6)		900	} 19
B. Worked by companies	6 -89		(xvli)	Autpur to Rajbuthat (a)		. 3.60	, 12
C. Worked by State railway	22.02			Dwara to Maulong (3)  B. Muolong to Therria Ghat (b) .  Chabders (b) this Schargeners Light (2) .	. 13.00		) .
**************************************	113.7			Shahdara (Delhi) Saharaupur Light (2'6") Barant to Meerut	<del>.</del>	30 00	
•	•	427.13		(A. Catch (3' 6")— Anjar to Bhuj			26
1	TOTAL .	2.041.15		Anjat to Shuj B Gwalior Light (2' 0") — Sahalgarh to Shiupur			66
				C. Juliunder Kapurthala-ultanper (Nalive Stal.			

<sup>(</sup>c) Constructed but not worked.
(b) Commencement of work but authorized.
(c) Commencement of work but authorized and question of gauge not finally settled.
(d) Completion deferred.

### APPEN AX 41.

No. 514 R. C. of 1896.

GOVERNMENT OF INDIA,

#### PUBLIC WORKS DEPARTMENT.

RAILWAY CONSTRUCTION.

Simla, the 17th April 1896.

Terms on which the Government of India are prepared to consider offers for the construction by the agency of private companies of branch lines forming feeders either to State lines worked by the State or to railways worked by companies.

#### Read-

Public Works Department resolution No. 924 R.C., dated 15th September 1893. Public Works Department resolution dated 29th March 1895.

OBSERVATIONS —Many of the applications made under the above resolutions show that the terms for the construction of branch or feeder lines of railway have not been fully understood.

The Government of India have accordingly resolved to cancel the previous resolutions above quoted upon this subject, and to issue a fresh resolution embodying a summary of the concessions which (the previous assent of any railway company concerned having been first obtained) they are now prepared to give for the construction of branch or feeder railways, such concessions being usually confined to lines not exceeding 100 miles in length.

2. It should be clearly understood that those concessions are not applicable to the larger or more important railways or to mountain branches, for which separate negotiations are in all cases necessary.

RESOLUTION.—Branch lines forming feeders, whether to State lines worked by the State or to railways worked by companies, will ordinarily be made by the main line administrations who shall have a prior right to construct them.

The Government of India will, from time to time, publish a list of branch lines for the construction of which they are prepared to receive tenders.

They will consider and dispose of any application for the inclusion in the said list of any other line which can properly be described as a branch or feeder line, and which does not, except in special circumstances, exceed 100 miles in length.

- 2. Proposals for the construction of branch lines under this resolution must conform to the following terms and conditions:—
  - (i) Applicants must satisfy the Government that they are in a position to command substantial financial support.
  - (ii) The gauge to be adopted must be approved by the Government in each case.
  - (iii) The proposed railway shall be subject to the provisions of all Acts of the Legislature applicable to Indian railways.
  - (iv) The proposed railway shall be built in accordance with the fixed and moving dimensions for the time being prescribed by the Governor General in Council, and on plans and estimates that have been approved by that authority. The route of the line, the situation of stations, and other similar details shall be subject to approval by the Government.

#### APPENDIX 41—contd.

- (v) The line, while under construction, shall be inspected when and so often as an inspecting officer appointed for that purpose by the Government may consider desirable with a view to ensure the construction of the line up to the standard agreed upon.
- (vi) Inasmuch as these railways are chiefly required for the development of country hitherto deficient in means of communication, and the anticipated profits may not therefore at once be fully realised the Government of India are prepared to give financial assistance as set forth below. Proposals for financial concessions may be made in one or other of the following alternative forms:-
  - Under (a) the company will receive an absolute guarantee of interest at a rate not exceeding 3 per cent, and a higher return if the act cornings of the branch are sufficient to pay more than the guaran-teed dividend.

(a) It may be stipulated that, after the opening of the railway for traffic, the Government shall guarantee out of the revenues of India a fixed yearly minimum dividend in rapees

on the actual expenditure charged in the capital account of the branch railway company as entered in rupees in the company's books in India, with such share of the surplus net profits as may be agreed upon. The minimum dividend to be guaranteed in each particular case will depend upon consideration of the circumstances, but for the present no offer will be entertained that requires a guarantee exceeding 3 per cent.; or

Under (b) the company will receive a dividend of 3) per cent, provide t that the amount of the net enryings from local and interchanged traffic be softcient, and a higher return if the net earnings of the branch from its own traffic be sufficient to pay a

(b) It may be provided that a payment be made to the branch company by the main line to the extent necessary, together with the branch company's share of branch earnings [see section (6) of paragraph

3] to give the branch company a dividend of 3\frac{1}{2} per cent. per annum on the actual expenditure charged in the capital account of the branch railway company as entered in rupees in the company's books in India, provided always that the payment so made to the branch company shall in no case exceed the net earnings of the main line from traffic interchanged with the branch. This rebate will be granted from the first earnings of revenue by the branch. such payment being calculated at the close of the year, payments on account, however, subject to adjustment, being permissible at the close of the first-half of each year. The net earnings of the main line from traffic interchanged with the branch are assumed to bear the same proportion to the gross earnings of the main line from such traffic as the net earnings of the whole system including the branch bear to the gross earnings thereof. If the net earnings of the branch line equal or exceed  $3\frac{1}{2}$  per cent. on the actual expenditure as above, the whole of such earnings will go to the branch company.

In either of the above cases, (a) or (b), if the capital is raised in sterling the capital to be entered in rupees in the company's books in India shall be the actual amount realised in rupees from time to time by the several remittances of funds to provide for expenditure in India, together with the sterling outlay from time to time in England converted into rupees at the average rate of exchange obtained by the Secretary of State for his remittances during the halfyear preceding that in which the outlay shall have been incurred, and the capital expenditure in rupees on which the interest is from time to time to be calculated for the purposes of the guarantee or rebate, as the case may be, shall be the total outlay whether in India or England up to any such time as thereto charged.

(vii) The general character of the supervision and control that will be exercised by the Government over the branch railway, apart from

### APPENDIX 41- contd.

- the provisions of the Rail ays Acts and the preceding provisions of this resolution, shall be as follows:—
- (a) No capital expenditure by the branch railway company will be allowed as between the Secretary of State and the company unless the prior sanction of the Secretary of State shall have been obtained. The company shall have no power to increase its share or stock capital without the sanction of the Secretary of State or to borrow money except within a fixed limit and on specified conditions.
- (b) The branch railway company, if required, shall keep capital accounts and statistics in forms approved by the Secretary of State; and shall render, free of cost, all accounts and statistics required by the Government. The accounts and books will be subject to audit on behalf of Government.
- (viii) Funds for the execution of new works, properly chargeable to capital, found ne essary after the branch railway has been opened to public traffic shall be provided by the branch railway company. Such works and their cost shall be agreed upon between the branch railway company and the main line administration before they are put in hand. In the event of any difference of opinion arising between the branch railway company and the main line administration as to the necessity for and the cost of any new work, the matter shall be referred to the Director of Railway Construction as arbitrator, and his decision shall be final.
- (ix) The rates and arrangements in force on State railways in the matter of services rendered to all departments of the State shall apply.
- 3. The following are the principal additional concessions admissible for branch or feeder railways for the construction of which tenders may be invited:—
  - (1) The Secretary of State for India in Council, or the Government of India, respectively, will permit the charge of interest, at a rate to be agreed upon in each case, during construction to the capital account of the railway under the terms of the Indian Railways Act of 1894 (57 and 58 Viet., chapter 12), or the Indian Railway Companies Act, X of 1895.
  - (2) The land required for the construction of the branch railway will be provided free of cost. Such grant shall not include land required for quarrying, ballast, brickfields and kindred purposes.
  - (3) Electric telegraphs and telegraphic appliances will be supplied and maintained by the Government of India at the usual charges for such works.
  - (4) The results of existing surveys will be made available free of charge. When desired, fresh surveys will be made by the Public Works Department\* of the Government of India of any branch railway on the applicants depositing the estimated cost thereof in a Government Treasury, on the understanding that no preferential claim to a concession is thereby established. If permission be eventually given for the construction of the line the actual cost of all such surveys, as well as of those made at the cost of Government, may be included in the capital cost of the railway. No responsibility will be accepted by Government for the accuracy of any survey, plan, estimate, or orther information supplied.
  - (5) The branch railway may be constructed by the main line administration, and will be maintained and worked by that administration, during the full currency of the contract to be entered into for the purpose, at a fixed ratio of expenses to earnings in each half-year. The ratio will, when the branch railway is of the same gauge as that of the working railway, usually be that obtaining on the whole system as from time to time existing,

<sup>\*</sup> These will now be made by the Railway Board.

### APPENDIX 41-contd.

including the branch railways, but will not exceed 50 per cent. of the gross earnings of the branch from all sources, and will be inclusive of charges for the use of the main line rollingstock.

- (6) Such expenses on account of the Board of Direction of the branch line railway company as may be incurred with the sanction of the Secretary may be charged—
  - (a) during construction to the capital account of the branch line company;
  - (b) after opening, and until the minimum dividend under paragraph 2 (vi) (a) or (b) is received by the branch line company, as part of the working expenses to be "met out of the stipulated percentage of the earnings of the branch taken by the working railway; and

(c) thereafter out of the general receipts of the branch line Company.

- (7) Railway materials for the branch railway will be carried over State lines at the special rates prescribed for such materials belonging to State railways.
- 4. The Government of India reserve the right to purchase all such branch railways at the expiry of 21 years or at subsequent intervals of 10 years on 12 months' notice, the purchase price being 25 times the yearly average net earnings, not including relate payments of the three years preceding the purchase, with a maximum price of 120 and a minimum of 100 per cent. of cost price on a rupce basis.
  - 5. The Government also reserve--
  - (i) the right to fix and vary from time to time the classification of goods, and maximum and minimum rates for each class of goods, as well as of passengers; and
    - (ii) a general control in respect to the number and timing of trains.
- 6. Applications for concessions to construct branch railways under the terms of this resolution should be submitted in the form prescribed by memorandum A hereto attached, to the address of the Secretary to the Government of India, Public Works Department\*.
- 7. Applications for fresh surveys to be carried out on the terms detailed in condition 3 (4) above should be submitted in the manner prescribed by Memorandum B hereto attached, to the address of the Secretary to the Government of India, Public Works Department\*.

The Governments of Madras, Bombay, Bongal, the North-Western Provinces

and Outh and the Punjab.

The Chief Commessioners of the Central Provinces, Burma and Assam.
The Resident at Hyderabat.
The Resident in Mysoro.
The Agents to the Governor General in Central India, Rajputana and Balu-

The Consulting Enigneers to the Government of India for Railways, Cal-

The Accountant General, Public Works Department.

ORDER.—Ordered that this resolution be forwarded for information to the Local Governments and Administrations and to the Officers marginally noted.

Also that it be published for general information in the Gazette of India.

W. S. S. BISSET, Col., R. E.,

Secretary to the Government of India.

#### Documents accompanying.

Enclosure No. 1 .- Memorandum A for the guidance of persons or syndicates desir-\_ous of submitting proposals for the construction of branch or feeder railways, with form A and Appendices A, B and C.

Enclsoure No. 2.-Memorandum B for the guidance of persons or syndicates desirous of having surveys made for branch or feeder lines of railway at their expense by the Public Works Department.

<sup>·</sup> Such applications should now be addressed to the Bailway Board.

### APPENDIX 41-contd.

Enclosure No. 1 (with Form A and Appendices A, B and C) to Government of India resolution No. 514 R. C. of 1896.

#### MEMORANDUM A.

For the guidance of persons or syndicates desirous of submitting proposals for the construction of branch railways in India forming feeders either to State lines worked by the State or to railways worked by companies.

- 1. All applications for leave to construct a branch or feeder railway in any part of British India are to be addressed to the Secretary to the Government of India, Public Works Department.\*
- 2. All such applications shall be printed, and shall be drawn up, as fir as may be, in form A attached hereto, and shall spends—
  - (a) the company, person or syndicate by whom the application is preferred; the proposed amount of capital, the number of shares, and the amount of each share;
  - (b) all the termini, together with the names of all the principal towns from, through, into, or near which the names intended to be constructed, as well as the names of each civil division and district to be traversed by the proposed alignment;
  - (c) the length, so far as known, of the proposed railway;
  - (d) the gauge, the weight of rails, etc.;
  - (e) the motive power to be employed;
  - (/) the maximum tolls, rates, and fares proposed to be charged on the projected rails ay;
  - (g) the proposals for working the railway when constructed; and if any agreement is under contemplation, or has been provisionally arranged with any existing railway administration under which the proposed line, when constructed, is to be leased out for working by such railway administration, the exact nature and terms of such agreement;
  - (4) any further information that may be required to enable Government to thoroughly unders and the scope of the proposals.
- 3. Every such application shall be accompanied by a map to a scale of one mile to one inch, with the line of the proposed rankway deline itel thereon, so as to show its general course and direction, and also by an estimate as correct as may be of the works proposed to be authorised.
- 4. When the applicants draw up their own detailed plans and estimates these domments are invariably to be prepared in strict accordance with the rules for the preparation of railway projects issued under the authority of the Government of India, of which copies may be obtained on payment from the Superintendent of Government Printing, Calcutta.
- 5. Lists will be published from time to time of the branch railways forming feeders, whether to State lines worked by the State or to railways worked by companies, for the construction of which the Government of India are prepared to receive tenders. Copies of such lists can be obtained on application addressed to the Secretary to the Government of India, Public Works Department.\*
- 6. Upon written application to the Director of Railway Construction permission will also be accorded to inspect, at all reasonable hours, the detailed plans, sections and estimates at the disposal of Government in regard to any particular route already surveyed, provided that they relate to branch railways, the construction of which the Government is prepared to entrust to companies; and copies of such plans, sections, and estimates will be furnished on payment of the cost of copying.
- 7. But in regard to all such information, statistics, plans, sections, or estimates, which may be furnished, it is to be recognised that the information thus offered to any person interested in the matter is simply the best information of the kind at the disposal of Government, and that Government cannot accept any responsibility whatever in regard to the accuracy of any of the documents.

<sup>\*</sup> Such applications should now be addressed to the Bailway Beard.

### APPENDIX 1. -contd.

### Form A.

To accompany all applications for leave to construct a branch or feeder railway in any part of British India.

	Nature of particulars to be specified.	Particulars.
1	The name of the company, person, or persons by whom the application is preferred; the proposed amount of capital, the number of shares, and the amount of each share.	
2	The termini, together with the names of all the principal towns from, in, through, or into, or near which the railway is intended to be constructed.	Reference to an appendix (vide appendix A) may be here given, if necessary.
3	The length, as far as known, of the proposed railway.	4
4	The gauge proposed and weight of rails, etc.	
5	The motive power to be employed.	
6	The maximum tells, rates, and fares, intended to be charged on the proposed railway.	Reference to an appendix (vide appendix B) may be here given, if necessary.
7	Details of any agreement which may have been provisionally arranged, or which it is desired to enter into, under which the proposed line, when constructed, is to be leased out for working to any existing railway administration.	Reference to an appendix (vide appendix C) may be here given, if necessary.
8	Any further information that may be required to suable the Government of India to thoroughly understand the scope of the proposals.	

# APPENDE 41.-contd.

### Appendix A.

# Alignment of proposed branch railway.

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Towns.	Districts or provinces.						
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# APPENDER 41.—contd.

## Appendix B.

Schedule of maximum and minimum rates and fares intended to be charged on the proposed branch railway.

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	1st class	в.	•	•	•	•		•		•	•••	•••
	2nd clas	ss .		•		•	•	•		•	•••	•••
	Interme	diate	class				•				•••	•••
,	3rd or l	owest	elası	з.	•						•••	***
										Maxi Pics per per i	mum. maund	Minimum, Pics per maund per mile.
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											imum. per mil <b>e.</b>	Minimum. Pies per mile.
Carriages										•		
	Single c	arria	go .	•	٠	•	•	•	•	•	•••	***
	_		_				:	•			imum, r truck.	Minimum. Pies per truck.
	Two or	more	Carri	ages	on or	ie truc	k.	•	•		•••	•••
		•									ximum oer mile.	Minimum. Pies per mils,
Horses-												
	Single 1	iorse	•	•	•	•	•	•		•	•••	•••
										Maxim Pics p miles or p there	er 50 portion	Minimum. Pies per 50 miles or portion thereof.
Dogs-	Each											
	1,400	•	•	•	·	•	•	•	•	First 10	O miles. nuas.	Every additional 100 miles. Annas.
Parcels-											•	
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	11	"		"		<b>3</b> 1	"	•	•	•	•••	•••
	,,	"	40	"	8	"	"	•	•		•••	•••
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Goods ra	tes—											
	5th clas	ss.		•		•	•	•	•	•	•••	•••
	4th "	•		•	•	•	•	•	•	•	•••	•••
	3rd "	•	•	•	•	•	•	•	•	•	•••	•••
	2nd "				•	•	•	•	•	•	•••	•••
	lst ,,	•			•				:	•	•••	•••
	Coal, ed	lible :	grain	, and	other	low-	priced	stapi	es to	bo		
	, oar	ried a	it spe	cial r	ites	•	•	•		•	•••	•••

# APPENDIX 1.—contd.

# Appendix C.

### Working of proposed branch railway.

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	abandan interior as historian Palagons -			
(iii), ctc.,				
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### APPENDIX 1-contd.

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i n <b>as be</b> e piected b	en provisionally arranged with the Railway Company to ranch railway, when completed, on the following terms:—
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	(ii)
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	(iii), etc.,
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### APPEND 41-concld.

Enclosure No. 2 to Government of India resolution No. 514 R. C. of 1896.

#### MEMOCANDUM B.

For the guidance of persons or syndicates desirous of having surveys for branch or feeder/lines of railway in India carried out at their expense by the Public Works Department\*.

- 1. All applications for the survey of proposed branch or feeder railway routes in any part of British India are to be addressed to the Secretary to the Government of India, Public Works Department.
  - 2. All such applications shall specify—
    - (a) the company, persons, or syndicate by whom the application is preferred;
    - (b) all the termini, together with the names of all the principal towns from, through, into, or near which the survey is intended to be carried, as well as the names of each civil division and district to be traversed by the proposed alignment;
    - (c) the length, so far as known, of the proposed railway;
    - (d) the gauge and the motive power to be employed;
    - (e) the intentions of the applicants as to the construction and working of the railway. If it is intended that the working shall be leased to any existing railway administration, the nature of the contemplated agreement shall be specified.
- 3, Every such application shall be accompanied by a map to a scale of one mile to one inch, with the line of the proposed survey delineated thereon, so as to show its general course and direction.
- 4. If the detailed plans and estimates are submitted to Government, these documents are invariably to be prepared in strict accordance with the rules for the preparation of railway projects issued under the authority of the Government of India, of which copies may be obtained on payment from the Superintendent of Government Printing, Calcutta.
- 5. Upon written application to the Director of Railway Construction permission will also be accorded to inspect at all reasonable hours the detailed plans, sections, and estimates, at the disposal of Government in regard to any particular route already surveyed, provided that they relate to branch or feeder railways the construction of which the Government is prepared to entrust to companies; and copies of such plans, sections and estimates will be furnished on payment of the cost of copying.
- 6. But in regard to all such information, statistics, plans, sections, or estimates, which may be furnished, it is to be recognised that the information thus offered to any person interested in the matter is simply the best information of the kind at the disposal of Government, and that Government cannot accept any responsibility whatever in regard to the accuracy of any of the documents.

There will now be carried out by the Railway Board.
 Such applications should now be addressed to the Bailway Board.

### APPROIX 42.

Communication between passengers and the guards and drivers of trains.

No. R. T. 851

### RAILWAY BOARD.

To

THE SECRETARIES TO THE GOVERNMENTS OF MADRAS, BOMBAY AND BURMA, PUBLIC WORKS DEFARTMENT, RAILWAY BRANCH.

THE SECRETARIES TO THE GOVERNMENTS OF BENGAL, THE UNITED PROVINCES, AND EASTERN BENGAL AND ASSAM, PUBLIC WORKS DEPARTMENT.

THE HONOURABLE THE RESIDENT AT HYDERABAD.

THE HONOURABLE THE AGENT TO THE GOVERNOR-GENERAL FOR RAJPUTANA.

The Consulting Engineers to the Government of India for Railways, Calcutta and Lucknow.

Simla, the 27th June 1906.

I am directed by the Railway Board to inform you that they have had under consideration the necessity for the provision of an effective means of \*communication between passengers and the guard and driver of the train, and after a very careful consideration they are of opinion that the type of such communication, which is now in general use in England, should be adopted on the railways in India.

2. The details of the type referred to will no doubt be entirely within the knowledge of the various railway administrations here, but a simple description of it is that—

A chain runs along both sides of the inside of each carriage just below the point where the roof meets the sides. The chain can be easily pulled by any passenger having need for so doing, and the effect of the chain being pulled is to open a small valve connected with the vacuum brake which simultaneously calls the attention of both the guard and driver by decreasing the vacuum and would in time stop the train by the application of the brakes. In addition to opening the valve above referred to, a disc at the outside corner of the carriage is actuated. The normal position of this disc is at right angles to the side of the carriage in a horizontal plane, that is edge on. When actuated by the pulling of the chain the disc revolves into a vertical position, and can be seen from either end of the train and locates the carriage from which the alarm has been given. The system has been found to work in England most satisfactorily and is, comparatively speaking, inexpensive.

- 3. The Railway Board have, therefore, given orders to the three Stateworked railways, viz., North-Western, Oudh and Rohilkhand, and Eastern Bengal, to at once apply this means of communication to all new and re-built stock for all classes of passengers, and in addition the communication will also be fitted to all existing stock of all classes as rapidly as possible.
- 4. It will be readily understood that in a matter of this kind unformity, which also means interchangeability between all classes of stock of the same gauge, is a vital necessity and as the type of communication approved by the Board has stood the practical test of experience satisfactorily, they desire that the type shall be made universal so far as the railways in India are concerned.

# APPENDICE 2-concld.

5. The Railway Board consider the provision of an effective means of communication between passengers and guards and drivers a matter that affects the safety of the public travelling by railways, and under Section 62, Chapter VI of the Indian Railways Act of 1890, they require all railways to adopt the above type of communication on all classes of their carriages now under construction or to be built either as additions or renewals, and that such type of communication be fitted to all existing carriages of all classes within two years from the date hereof.

No. R. T.  $\frac{351}{8}$ , dated Simla, the 27th June 1906.

Copy forwarded to the Managers, North-Western, Oudh and Rohilkhand, and Eastern Bengal State Railways, for information and necessary action.

### APPROIX 43.

Rules for the design and inspection of Signalling and Interlocking.

No. R. S. 87-3. RAILWAY BOARD.

- 1. THE CONSULTING ENGINEERS FOR RAILWAYS, MADRAS, BOMBAY AND BURMA.
- 2. THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA AND LUCKNOW.
- 3. THE MANAGERS, NORTH-WESTERN, OUDH AND ROHILKHAND AND EASTERN BENGAL STATE RATIONAVO

Simla, the 17th August 1906.

Senior Govt. Inspector's No. 1506, dated your No. 800, dated With reference to correspondence ending with Senior Govt. Inspector's No. 2404-70-C.R., Senior Govt. Inspector's No. 1092, dated No. 381-T., dated your

11th April 1905. 2nd Murch 1905. dated 1st December 1905. 6th March 1905. 18th January 1905.

I am directed to forward herewith a set of rules for the design and inspection of Signalling and Interlocking, and to say that the object in compiling these rules is to guide signalling manufacturers in meeting the requirements of Railway Administrations and Government Inspectors in passing the installations put up for ensuring safety to traffic. These rules take the place of the orders which were issued in Director of Railway Construction's No. 251-R.S. dated 17th February 1902, and Rules referred to in questions 47 and 50 ir Form IX mentioned in Chapter II, Section (2) of the Rules for the Inspection of Railways prior to opening.

2. I am accordingly to say that the Railway Board authorise their adoption and will take the opportunity to include them in the next edition of the Rule for Inspection of Railways prior to opening.

Documents accompanying.

Set of Rules referred to.

# APPENDE 43-contd.

#### SIGNALLING AND INTERLOCKING.

### SECTION I.

The following conditions are essential to any system of interlocking.

- 1. It shall not be possible to lower conflicting signals, at the same time.
- 2. Warning Signals, Home Signals, Routing Signals, and Starting Signals, where provided, shall be interlocked with the points in the station, so that it shall not be possible to lower any such signal until—
  - (i) all points on the running road are properly set,
  - (ii) all facing points on the running road are locked by a lock fixed at the points,
  - (iii) all points giving access to the running road from sidings and goods lines are so set as to prevent the running road being fouled,
  - (iv) level crossing gates, if controlled, are locked across the roadway.
- 3. With reference to rule 2 above, the lowering of the Signal shall prevent—
  - (i) the position of any of the points or traps referred to being altered, or
  - (ii) any facing points or gates being unlocked, until the Signal is again put to danger.
- 4. When all signals are at "Danger," all points, which would be locked by the lowering of such signals, must be free for shunting purposes.
- 5. The arrangement of Facing Point Locks must be such that the points cannot be or become unlocked whilst a train is passing over them.
- 6. Facing Points which cannot be protected by trap switches from being burst trailing, must be detected each time the Home Signal is lowered.
- 7. It must be impossible to lower a Warner until all Main Line Signals in advance have first been lowered, the lowering of the Warner must back lock such signals except that when the Outer is worked from the points and the Warner from the cabin or platform, the Warner need not back lock the Outer.
- 8. When the Outer Signal is worked from the points and the Home Signal from the cabin or the platform, it shall not be possible to lower the Outer until the Home has been lowered, and the lowering of the Outer shall not back lock the Home. The arrangement must be such that when the Home is put back to danger the Outer shall be automatically returned to danger. Except that if desired, arrangements may be made to allow of the interlock between the Outer and Home Signals being released, under the control of the Station-Master for the purpose of bringing a train up to the Home Signal.
- 9. Points and Facing Point Locks must be worked by rodding and not by wire or other flexible connection.
- 10. The normal position of every signal shall be at danger, except in the case of Calling-on arms, and no Signal shall be used unless it is constructed to stand at, or return to, the normal position in case of failure of any part of its connections.
- 11. The arrangement must be such that the control effected by the interlooking cannot be vitiated even if a signal wire be out of adjustment or forcibly stretched.
- 12. The locking in a lever frame must act as soon as a lever is moved, and release must not be effected until it reaches the end of its travel.
- 13. All Facing Points must be fitted with an efficient gauge tie bar at the nose of the switches and be provided with double stretcher bars.

It is desirable that the following conditions should be complied with.

- 14. The design of a station yard should be such as shall, where possible, provide for the isolation of running roads from each other, and from all sidings and goods lines. But where the connection of sidings and goods lines with a running road is direct, and no other means, therefore, exists of denying access to such running roads to vehicles on a siding, traps must be provided on the siding and shall be treated as points as in rule 2 (iii) above. Such traps shall be protected by signals or indicators, and shall be fixed at a sufficient distance short of the fouling point, and in such a position as regards the side of the track on which they are fitted, as shall ensure that an engine or vehicle derailed at the trap shall not foul the running road. An efficient derailing scotch block shall be considered a trap for the purpose of this rule. For the purpose of this rule and of Rule 2 above all loops or lines which are not signalled for running trains shall be considered as sidings.
- 15. Except where duly qualified Cabinmen are employed the Station-Master must be provided with an efficient control, so that it shall be impossible for any signal controlling the movements of trains approaching or leaving the station, to be lowered without his consent and co-operation. In the case of crossing stations on Single Line no mechanical control shall be considered efficient unless it provides for the independent control of each of the Home Signals.
- 16. When Signals are fixed some distance in advance of Facing Points to which they refer, the arrangement should be such as to render it impossible, within reasonable limits, to put the Signal to Danger behind a train and then unlock the points before the train reaches them.
- 17. The act of putting the Warner to Dauger must not release the trailing points at the far end of the station.
- 18. The counterweights of Signals should be fixed high up the post out of reach, unless the arrangement is such that the signal cannot be lowered by raising the counterweight.
- 19. Ordinary Facing Point Locks shall be provided with a treadle har of greater length than the greatest distance between two consecutive pairs of wheels in a train. Such bars to rise level with the top of the rail in the case of inside treadle bars, and at least one inch above it in the case of outside bars, in the centre of the travel.
- 20. All Facing Points, the locks of which are actuated by separate levers and which are locked in either position, shall be provided with efficient detectors working in connection with the signals controlling trains running over such points in the facing direction.
- 21. All Facing Points which are worked and locked by the same lever shall be provided with efficient detectors working in connection with the signals controlling trains running over such points in the facing direction.
- 22. When points are not locked from the place from which the signals are worked, the control by means of any detectors fitted to such points should extend to the locking arrangements as well as to the actuation of the points.
- 23. Except with the previous sanction of the Government Inspector, the following maximum distance at which points may be worked from the lever shall not be exceeded:—

Trailing Points, or Facing Points, worked by a separate lever ... 300 yards. Facing Points worked and looked by the same lever ... 200 yards.

- 22. Rodding must be properly compensated in all cases where the lead exceeds 80 feet.
- 25. In the case of Key-locked Facing Points the locks shall he so placed as to be inaccessible during the passage of a train over them unless the

### APPENDIM 43-contd.

arrangement is such that the key, being required for the release of the Signals, cannot be brought to the points when Signal is "Off" or for an appreciable time after it has been put to Danger.

- 26. Key locks where used must be connected to the track in such a manner as to ensure the necessary rigidity.
- 27. Important Signals should be fixed in such position, and at such height above rail-level, as will ensure their being alearly seen by Drivers, having regard to the nature of the background and relative height of Subsidiary Signals. Every Signal must, if possible, be visible from the Signal cabin or point from which it is worked, otherwise efficient repeaters should be provided.
- 28. All interlocking gear must be of strong and substantial construction. The apparatus must be such as can easily be maintained in an efficient condition under ordinary conditions of working.

#### SECTION III.

### Instructions regarding Signals and Interlocking gear generally.

#### Locking frames and cabins.

- 29. The locking in a frame should be compactly arranged, and should not occupy such space in front of the levers as will prevent the cabinman having the best possible view of the railway, nor such space at the back as will prevent him standing well up to the levers. The locking should be easily got at for cleaning, lubricating, alterations or repairs, as far as possible without interfering with the working of the frame. There should be as few wearing parts as possible, and all parts should be interchangeable. The frame should not only be effective in working, but should be strong, durable, as simple as possible in construction and capable of extension it required.
- 30. The levers should be painted with distinguishing colours, and each lever in addition to its own number should bear the numbers of the levers which must precede it, in the proper order. In the case of tappet locking the arrangement must be such that no lock can enter a notch other than that for which it is intended. A sufficient number of spare levers should be provided.
- \$1. When points and signals are worked from signal cabins, these should be at such height above rail level as will ensure the Signalman having a good view of the points and signals under all conditions.
- 32. The fixed lights in signal cabins should be screened off so as not to show in the direction of approaching trains.
- 33. Each signal cabin should be provided with a clock and with a proper diagram showing the arrangement of points and signals worked from the cabin in their normal position, with their numbers.

### Signals. 1

- 34. Signals shall be used whenever and wherever they are ordered by special instructions.
- \* 25. Every Stop Signal shall be fixed at the point at which it is desired the train to which it refers shall stop.
- 36. A signal arm shall be placed on the left hand side of the post as seen by the Driver of an approaching train to which such signal refers.
- 37. Signals shall be fixed on the side of the line on which they can best be seen by Drivers of approaching trains, but the left hand side of the track is to be preferred unless the sighting is greatly interfered with.
- 38. Signal arms shall be painted red with a white bar on the side facing trains to which they refer, and white, with a black bar on the other side. On Warning Signals the bar is to be parallel with the notching.
- 39. Signal arms referring wholly to lines which are not used for passenger traffic may be distinguished by rings.

### APPENDIA -contd.

- 40. Signal arms not in use shall be distinguished by having two crossed bars attached to them, and must remain fixed at Danger.
- 41. Where two or more lines diverge, the Signal shall be fixed on a bracket post.
- 42. Where two or more lines converge, the Signals shall, where possible, be fixed on separate posts.
- 43. But in both the above cases, where the number of Signals is considerable, they may be fixed on separate posts or dolls carried on a signal-bridge provided for the purpose.
- 44. In the case of all bracket or bridge signals, the left hand Signal shall refer to the left hand road, the second Signal from the left to the road next the left hand road, and so on.
- 45. Signals on brackets and bridges shall be distinguished as much as possible by grouping and by making the more important Signals higher than the less important.
- 46. Signals referring to parallel tracks should as far as possible be arranged in transverse line.
- 47. Signals should be so fixed that the distance between the lamps of adjacent Signals shall in no case be less than 6 feet, except in the case of platform starting, or other subsidiary Signals.
- 48. Not more than one Signal referring to trains moving in the same direction (whether on the same track or on separate tracks) shall be placed on the same post, unless—
  - (a) there be only two Signals on the post and the lower Signal is a Warner fixed from six to seven feet below the other Signal, or
  - (b) the lower Signal is a Co-acting Signal or Calling-on Signal fixed at least fifteen feet below the next Signal, or
  - (c) the sanction of the Government Inspector has been obtained.
- 49. Important Signals should ordinarily have the arm not less than 24 feet above rail-level, and should conform to the following minimum dimensions:

(i) length of arm from spin	ıdle	•••	•••	• • •	4′ 6″
(ii) width of arm	•••	••	•••	•••	10"
(iii) diameter of front lens	•••	•••	•••	•••	5"

- 50. Platform or loop starting Signals, and subsidiary Signals generally shall have a short arm fixed, as a rule, not more than 18 feet above rail level.
- 51. Pulleys for wire must be of such construction that the wire cannot be jammed between the pulley and bracket.
- 52. Lofty Signals, or Signals in exposed situations, should be guyed; means for adjustment of guys should also be provided.
- 53. Signal connections should be of approved pattern galvanized strand or solid steel wire. The stakes for carrying wire should not be more than 36 feet apart. Junctions of wire with chain or shackles to be made with thimbles.
- 54. Every angle wheel should be provided with not less than 3' 6" of chain (not less than \frac{1}{4}"), the ends of chains to be provided with split links.
- 55. Signal wires should be provided with adjusting screws, but where the lead exceeds 1,000 ft. an efficient regulator to be provided, placed so as to be within easy reach of the man working the signals.
- 56. Electric Signal Repeaters where provided should be of the three position type.
- 57. The Front lenses of subsidiary Signals, and the back lights of all Signals, are to be as small as possible consistent with efficiency.

# APPEND 43-confd.

- 58. (1) Every fixed Signal, the signt of which cannot be seen from the point from which the Signal is worked, must be provided with a back-light or tell-tale, by which the Station-Master may see whether the light is burning or not.
- (2) Back-lights of Signals milks show a small white light when "on" and no light at all in any other position.
- (3) When a Warner is used by itself, its fixed green light must show a white back-light.
- 59. The lamps of all Signals should be fixed and ladders provided for lighting and cleaning them. Except under special instructions the front speciale frame must be rigidly attached to, and work on the same spindle as the Signal arm.
- 60. Miniature and Dwarf Signals used to control shunting shall show the same front and back-lights as are prescribed for Signals, but front lenses shall not be more than 3" dismeter or back lenses more than 1\frac{1}{2}" diameter
- 61. Point indicators shall show a white light for the straight and green for the turn-out in both directions.
- 62. Point indicators used to protect and indicate the position of traps shall show a red light in front when the trap is open and green when it is closed; back-lights, white waren the trap is open, green when the trap is closed.

#### Points.

- 63. Facing Points should be avoided as far as possible, but when they cannot be dispensed with they must be placed as near as practicable to the levers by which they are worked or locked.
- 64. Adjusting cranks should be used on the last connection to each pair of points Facing Point Lock, or other apparatus worked by rodding.
- 65 Travelling rollers of approved pattern should be used for all rodding connections and be fixed not less than 7 feet apart.
- 66. An adjusting screw or turnbuckle should be provided in each rod connection.
- 67 Where detectors are used it must not be possible for a detector slide to enter a notch other than that which it is intended for.
- 68. The keys used in key-locking should be of such a size as to minimise the chance of their being mislaid or broken.

#### SECTION IV.

#### Instructions for Government Inspectors.

When inspecting an interlocking installation, the Government Inspector must satisfy himself upon the following points:—

- 1. That the locking in the frame corresponds with that shown on the locking table.
- 2. That the diagram correctly represents the arrangement of the yard, especially as regards the normal position of points.
- 3. That before any Signal can be lowered, the running road to which it refers must be correctly made and locked, and that after the Signal has been lowered, no points or traps giving access to that road from sidings can be moved so as to allow the running road to be fouled.
- 4 That conflicting Signals cannot be lowered at the same time.
- 5. That all Signals are visible from the cabin or frame, or are provided with efficient repeaters.
- 6. That the Signalman has a good view of all points worked from his cabin.

### APPENDEL 43-concld.

- 7. That Signals come fully when lowered, and return freely to the danger position.
- 8. That when there are slotted or controlled Signals, the Signal can be returned to danger freely, by either of the levers by which it is controlled.
- 9. That in the case of a stop arm controlling a Warner below it, the Warner cannot be lowered unless the upper arm is "off," and that when the upper arm is put to danger the Warner, if "off" returns feely to danger, as well as the upper arm.
- 10. That Facing Point Locks are so set that the insertion of a 16 inch rod between the switch and stock rails, 6 inches from the nose of the former, prevents the points being locked.
- 11. That Facing Point Lock Plungers when withdrawn, clear the Stretcher blade by not more than 1 inch, and that the stroke of the plunger is not less than 6 inches.
- 12. That all switch and lock movements are adjusted to make full travel and require a lever to spring connections slightly before it is fully home.
- 13. That switches are adjusted to come tight against stock rail.
- 14. That when detectors are fitted each switch ratio detected independently either by separate detector blades or by means of a floating lever. Except that where a Facing Point Lock locks each switch independently separate detector blades are not necessary.
- 15. That treadle bars are of proper length as laid down in the rules given above, and rise to the full height in the centre of the travel.
- 16. That all cranks, locks, detectors, compensators, wheels, etc., are securely fixed to substantial bases fixed in concrete or attached to the sleepers.
- 17. That rod rollers are attached to timber cast-iron or stone blocks, or branches, let sufficiently into the ground to secure the lecessary rigidity.
- 18. That leading off gear of cabins is securely fixed to heavy timber or concrete.
- 19. That proper rules or instructions are provided for working.
- 20. No Interlocking Installation shall be passed by a Government Inspector unless the conditions laid down in Section I are fully complied with. But unrestricted speed through stations should not be allowed unless the conditions specified in Section II are complied with as well. It will be open to the Government Inspector to impose a restriction, if he judges it to be necessary, in cases where any of the Rules laid down in Section III have not been complied with.